Meeting Report

American Health Information Committee
August 1, 2006

The American Health Information Community (AHIC), a federally-chartered commission formed to help advance President Bush's call for most Americans to have electronic health records (EHRs) within 10 years, held its seventh meeting on August 1, 2006, at the Department of Health and Human Services (DHHS), 200 Independence Avenue, SW, Washington, DC, 20201.

The purpose of the meeting was to bring together Community members to continue discussion of steps toward ways to achieve its mission of providing input and recommendations to the Department of Health and Human Services (DHHS) on how to make health records digital and interoperable, and assure that the privacy and security of those records are protected in a smooth, market-led way. The meeting's discussions focused on: (1) a discussion of the Electronic Health Records Workgroup emergency responder use case recommendation; (2) an overview of quality and transparency including stakeholder and technical perspectives; (3) an update on the Nationwide Health Information Network (NHIN); and (4) a discussion of goals, objectives, and strategies as AHIC moves forward.

DHHS Secretary Michael O. Leavitt chairs the Community, and Dr. David Brailer serves as Vice-Chair. The remaining 16 members, selected by Secretary Leavitt, are key leaders in the public and private sectors who represent stakeholder interests in advancing the mission of the Community and who have strong peer support. Members serve 2-year terms.

A summary of the discussion and events of the August 1st meeting follows.

Call to Order

Joining Secretary Leavitt counterclockwise around the table were:

David Brailer, MD, PhD, Vice Chairman, AHIC

Scott Serota, President and CEO of the Blue Cross Blue Shield Association

Robert Cresanti, Under Secretary of Commerce for Technology, U.S. Department of Commerce

Linda Springer, Director of the Office of Personnel Management (Dan Green, Deputy Associate Director, Center for Employee and Family Support Policy, OPM, represented Ms. Springer during part of the meeting)

Mark McClellan, MD, PhD, Administrator of the Centers for Medicare and Medicaid Services (Tony Trenkle, Director, Office of E-Health Standards and Services, CMS, represented Dr. McClellan for part of the meeting)

Steve Jones, DHA, Principal Deputy Assistant Secretary of Defense for Health Affairs (Dr. Jones represented William Winkenwerder, Jr., MD, Assistant Secretary of Defense for Health Affairs, who also was represented by Carl Hendricks, CIO of the Military Health System, for part of the meeting)

Nada Eissa, Deputy Assistant Secretary, U.S. Treasury

Craig Barrett, PhD, Chairman of the Board, Intel

Steven Reinemund, CEO and Chairman of Pepsico, Inc. (David Ayre, Senior Vice President, Compensation and Benefits, Pepsico, Inc., represented Mr. Reinemund for part of the meeting)

Jonathan Perlin, MD, Under Secretary for Health, Department of Veterans Affairs and Veterans Health Administration (Rob Kolodner, MD, Chief Health Informatics Officer, VHA, represented Dr. Perlin for part of the meeting)

Lillee Gelinas, RN, MSN, Vice President of VHA, Inc.

Charles N. (Chip) Kahn III, President of the Federation of American Hospitals

Julie Gerberding, MD, Director of the Centers for Disease Control and Prevention (Ed Sondik, MD, Director of the National Center for Health Statistics, CDC, represented Dr. Gerberding for part of the meeting)

E. Mitchell (Mitch) Roob, Secretary of the Indiana Family and Social Services Administration

Nancy Davenport-Ennis, founder of both the National Patient Advocate Foundation and the Patient Advocate Foundation

Douglas Henley, MD, Executive Vice President/CEO, American Academy of Family Physicians

Kevin Hutchinson, CEO of SureScripts

Introductory Comments

After welcoming Community members to the meeting, Secretary Leavitt took a moment to present Dr. Robert Wah with an award for Outstanding Service in Public Health. Dr. Wah has been on detail from the Department of Defense (DoD) and has provided a great deal of support and expertise to DHHS in that time. Secretary Leavitt also acknowledged and thanked DoD and other organizations that have provided assistance and support to AHIC. In accepting the award, Dr. Wah thanked Secretary Leavitt, Dr. Brailer, and the Community while emphasizing the importance of AHIC's mission.

Secretary Leavitt also recognized and thanked departing Community member Dr. Jonathan Perlin, who is leaving the Veterans Administration (VA) to pursue an opportunity in the private sector. In addition to his valuable input as a member of AHIC, Dr. Perlin has been instrumental in strengthening ties between the VA and DHHS.

Secretary Leavitt noted that in July, the Institute of Medicine (IOM) released a report indicating that more than 1.5 million Americans are injured every year by drug errors in hospitals, nursing homes, and physicians' offices. The IOM recommended that all health care providers use electronic systems to provide prescription drugs and safer care at lower cost. He also noted that two weeks prior to this Community meeting, the Certification Commission for Healthcare Information Technology (CCHIT), acting on AHIC recommendations, announced the first electronic health care records to be certified. As of this AHIC meeting, 18 systems have earned CCHIT certification, with more to follow soon.

Certification is an important step in helping physicians adopt health information technologies. Another is ensuring that rules and regulations keep pace with this rapidly changing landscape. Related to these steps, Secretary Leavitt announced that DHHS has released new regulations to facilitate physician adoption of health information technology—these rules create new exceptions to the physician self-referral law and establish new safe harbors under the federal anti-kickback statute. These regulations will allow certain donations of health information technology that may not have been permitted before. Hospitals, health care providers, and health plans will be able to take an active role in putting electronic health records in the hands of physicians. Furthermore, those physicians who are willing to use these new systems now have a better chance of getting them much sooner. For those physicians, it will be important to consider compatibility between their system and those used by the hospitals with which they interact. It also will be important to use a CCHIT-certified system that is technically capable of interoperability in limited ways now, but also is capable of expanding in the future.

The newly announced DHHS regulations will provide more physicians with access to EHRs and electronic medical systems, and represents a step closer to the day when Americans can travel across the country and around the world and have their health information travel with them. It also represents movement toward a time when medical histories will not have to be recreated on paper, and when prescriptions are filled much more accurately.

Secretary Leavitt also reported that the House of Representatives has passed the Health IT Bill, which does not promote interoperability. As drafted, the House bill may allow ineffective, closed communication and anti-competitive behavior to occur. Secretary Leavitt urged conferees to re-examine the bill and to make interoperability a specific requirement; he also invited the conferees to review the DHHS regulations and use them as part of a roadmap in their deliberations.

Secretary Leavitt concluded his opening remarks by thanking Community members for their efforts and by noting that in his recent visits across the country to sites working in specific communities with pilots on health information technology, it is becoming increasingly clear that we are closer than most think in terms of achieving the vision of having interoperable health records.

Before moving forward with the day's agenda, Dr. Brailer reminded Community members that this was AHIC's seventh meeting, and that the emergence of certification, the House bill, and the Secretary's announcement of regulations related to anti-kickback, safe harbor, and the Stark exception are momentous milestones. Dr. Brailer echoed Secretary Leavitt's sentiments in thanking Dr. Wah for his service to AHIC. He also thanked former AHIC member Mark Warshawsky, who has left the Treasury and has been replaced by incoming Community member Nada Eissa, Deputy Assistant Secretary of the U.S. Treasury. Finally, Dr. Brailer introduced and welcomed AHIC's new Executive Director, Judy Sparrow, who brings a great deal of experience in health care and government to the Community.

Approval of the June 13, 2006, Meeting Minutes

Minutes from the June 13, 2006, AHIC meeting were distributed, reviewed by Community members, and approved unanimously with no changes.

EHR Workgroup Recommendation: Emergency Responder Use Case

Community member Lillee Gelinas, Vice President of VHA, Inc., provided AHIC with an overview of the EHR Workgroup recommendation addressing the issue of emergency responder EHR needs. Ms. Gelinas explained that some of the needs for interoperable EHRs were highlighted through Hurricane Katrina response efforts. Triage systems needed to communicate with temporary care systems, and temporary care facilities with longer-term care facilities. Providers in evacuation centers needed access to the medical histories of evacuees, and evacuees needed records of the care provided to them in transient facilities. Those who were permanently displaced needed their new permanent care providers to have access to all of their medical histories.

Recommendation 62 of the *Katrina Lessons Learned Report* states, "Foster widespread use of interoperable electronic health record systems to achieve development and certification of systems for emergency responders within the next 12 months." A number of initiatives are underway to begin addressing the needs for an emergency response EHR, with several federal agencies already engaged in this work. To make these efforts interoperable and mutually supportive, there is a need to harmonize the standards for key health care data elements. These harmonized standards will be central to many emergency response activities and also will play important roles in routine care and routine care systems. Ms. Gelinas emphasized the importance of community support related to this work.

DHHS has committed to using the Federal Health Architecture program to help develop a use case for emergency response EHRs. The EHR Workgroup is proposing that AHIC prioritize the development of an emergency responder EHR use case through the following recommendation:

- Under the leadership of the Office of the National Coordinator for Health Information Technology, an emergency responder use case should be developed and prioritized for the attention of the Health Information Technology Standards Panel and other ONC-led initiatives. This use case should describe the role that an emergency responder EHR will provide, comprising at a minimum, demographic, medication, allergy, and problem list information that can be used to support emergency and routine health care initiatives. The use case should leverage the work in related activities from the AHIC EHR Workgroup and elsewhere. To meet the needs in a variety of followup activities, this use case should be available in October of 2006.

Ms. Gelinas added that this recommendation is supported by information obtained through research and testimony to the EHR Workgroup. In closing, she acknowledged the efforts and leadership of Dr. Perlin in guiding this Workgroup.

Discussion

"I want to thank the group for their work and I will just add we all saw first hand why this is important. We're in hurricane season again and…we never know when it will be needed again. We need to be ready and I'm anxious to drive this forward…" – Secretary Leavitt

"In addition to the American College of Emergency Physicians, we also heard from direct front-line emergency responders, EMS services, as well as individuals and organizations that served in Katrina…In fact, the AHIC heard testimony of a Southern Governors' workgroup found…convergent [information] with our experience in Veterans Health Administration…these characteristics, these data elements, were universally necessary and in a sense the minimum set, and I think we were frankly taken aback by the degree of consistency convergence that identified these specific elements repeatedly." – Dr. Perlin

"We, of course, concur with the recommendations made as you move forward…we've captured about 500,000 electronic health records over in the combat zone. And there may be some applicability there as we move forward because you know that's tough to read in an emergency situation…If it's applicable, we would ask that you look at that system." – Dr. Jones

"I would just note the very strong support that both DoD and VA have given to the Federal Health Architecture Project in conjunction with HHS, where a lot of these more technical discussions have occurred and certainly where the sharing of different ideas from the field of battle or just from day-to-day health care in the states has come forward." – Dr. Brailer

"From a pharmacy perspective, we would wholeheartedly support the recommendation, and just note that over the past 90 days there's actually been collaboration amongst the pharmacy industries for preparation for an emergency response plan. [We are] also working with the Southern Governors' Association and others in that environment and are very close to be able to deploy that plan for delivering medication history from the pharmacies to electronic health care record systems as well. So, we stand ready to support the recommendation." – Mr. Hutchinson

"From a biosurveillance point of view, I can't think of anything actually more critical than having information from the front line that can get directly into the pipeline and I think this is important for that purpose." – Mr. Sondik

- Following this discussion, Dr. Brailer announced that this recommendation from AHIC's EHR Workgroup was accepted by the Community and will be transferred under a letter to the Office of the National Coordinator and to Secretary Leavitt.

Quality and Transparency

Quality: Improving Care Through Information

Dr. Carolyn Clancy, Director of the Agency for Healthcare Research and Quality (AHRQ), opened this series of presentations by noting that numerous reports confirm a substantial gap between best possible and actual care. AHRQ's annual report on quality for the past two years has shown an annual improvement of 2.8 percent across all populations and settings. Dr. Clancy noted that despite this rate of improvement, expenditures are increasing much more rapidly, creating a "value disconnect." Health care purchasers are increasingly demanding that providers demonstrate the quality of care that they deliver.

Dr. Clancy described numerous examples in which public reporting of performance has been associated with significant improvements in care. There has also been a clear recognition of the need to align disparate monitoring initiatives. She also noted that in the private sector, there has been a proliferation of initiatives that link payment with performance. One consistent theme that has cut across AHIC discussions has been the need for a consumer-focused health care system—such a system will not work unless consumers have valid and reliable information about the quality and cost of care.

Dr. Clancy explained that quality assessment has been tightly linked with site of care or individual clinicians; there are few integrated or episode-based metrics, and robust measures have not yet been developed for all physician specialties (although many are actively under development at this time). Quality alliances have formed in recent years; these collaborations between providers, purchasers, consumers, and accreditors have produced uniform public reporting for hospitals and physicians. Two of these alliances, the Hospital Quality Alliance (HQA) and the Ambulatory Care Quality Alliance (AQA),

are addressing gaps in existing measure sets and the need for measures that span care delivery. Efficient data capture remains an aspiration—current electronic health care records do not support easy reporting of quality information. There is a tension in that many hospitals and individual providers are beginning to make investments in EHRs, but these investments are not yet helping them report on quality.

High-level opportunities to advance automation include the following:

- Examine options for and the feasibility of accelerating the use of clinical electronic data for chart abstraction and use of administrative data.
- Examine effective strategies used to capture clinical data electronically in successful private-sector initiatives (e.g., Bridges to Excellence).
- Review challenges encountered by health care organizations with full electronic health records in reporting on quality of care.
- Identify emerging best practices that link quality assessment and clinical decision support.

HQA's Role in Quality Measurement

In his opening remarks, AHIC member Dr. Charles Kahn III, President of the Federation of American Hospitals, noted that the hospital community would welcome the opportunity to work with the Secretary to make the language in the Stark Amendment more facilitative of interoperability. He reminded Community members that the HQA is a public-private partnership of hospitals, consumers, employers, labor, private payers, CMS, AHRQ, and others with the mission of improving health care for Americans and informing patients through measurement and reporting.

DHHS reports HQA measures on the Hospital Compare Web Site, where HQA's 21 measures are made public for each hospital in the country. These measures still depend on paper records for the most part, and automating this process in an electronic fashion represents a significant challenge, particularly because hospitals will have to expand the number of measures they report in 2007. In 2008, hospitals will be expected to meet some type of pay-for-performance based on those measures.

Dr. Kahn highlighted some near-term activities for the HQA, including: (1) formalizing its structure (e.g., priority setting for the hospital quality and performance agenda, selecting measures, governance, collection, and reporting; (2) developing a business model; and (3) seeking consensus on a refined business model by the end of 2006. He noted that there are tremendous expectations for the possibilities of measurement reporting that may not be met given the current trajectory of health information technology. Dr. Kahn added that there is a false impression that the current direction of health information technology and EHR proliferation in hospitals will make measurement seamless. He encouraged devising a strategy to develop health information technology EHRs that materially can contribute to measurement.

Automating Quality Reporting With Electronic Health Records

Kristine Martin Anderson, Principal at Booz Allen Hamilton, explained that hospitals today are deploying very highly skilled nurses and medical records personnel to look through both paper and electronic charts using complicated algorithms to come up with quality metrics. As part of this process, the challenge is not in knowing whether, for example, a drug was administered to a patient under certain circumstances—the challenge is in knowing whether or not every patient who should have received a drug did in fact

receive that drug (and whether patients who should not have received that drug did not receive it). This concept of appropriateness of giving therapy raises issues around contraindications, which represents another major challenge. Ms. Anderson used the example of the percent of acute myocardial infarction patients who have received a beta blocker within 24 hours of arrival at a hospital to highlight this challenge.

The current lack of standards represents a major barrier to automated quality measurement and reporting. Documentation can occur in many places within the medical record, complicating search algorithms and leading to confusing results. Clinical documentation often is unstructured, uses non-standardized nomenclature, and often is the last module implemented by hospitals. In addition, there is insufficient encouragement of documentation that would automate quality measurement.

Ms. Anderson explained that quality measurement relies on linkages between ambulatory and inpatient records, which often do not exist. Ambulatory records need to be accessible quickly to ensure compliance with time-based standards of care. Quality reporting cannot be automated by increasing the adoption of current-generation EHRs. There needs to be a connection between the current evolution of EHRs and the need to document whether or not the appropriate care was given at the right time. Also, more efficient reporting is needed to expand the number of conditions that are considered.

AQA and the AHIC

Dr. Douglas Henley, AHIC member and Executive Vice President/CEO of the American Academy of Family Physicians (AAFP), described the role and purpose of the AQA. This Alliance is comprised of physicians, consumers, employers, and payers who participate in a transparent process to determine: (1) performance measures for implementation across payers, (2) how to report data publicly and with clinicians, and (3) how to aggregate performance data across payers. Dr. Henley reviewed the list of AQA Steering Group members, which includes representatives from organizations such as the American Association of Retired Persons, AHRQ, CMS, AAFP, American College of Physicians, and many others.

Dr. Henley discussed the following issues associated with automated reporting of AQA measures: (1) EHRs are not yet "robust" in their abilities to seamlessly collect and report quality data in an automated fashion; (2) specificity of performance measures are required to allow EHR programming for data aggregation and reporting; (3) programming is needed that allows for "exemptions" based on contraindications, allergies, side effects, and patient choice; (4) consistent use of the same quality measures by all is necessary; and (5) there is a need to move away from administrative data.

Dr. Henley also described three short-term opportunities to automate reporting. The AHIC can consider developing use cases for quality reporting. These use cases could result in recommendations/directions to HITSP for the development of appropriate standards that relate to quality reporting, both in terms of how data are aggregated and they are reported and collected. Finally, those standards/criteria can be moved on to the CCHIT so that they become part of the certification process for EHRs.

AQA and Health Data Sharing and Aggregation

Dr. George Isham, Co-Chair of the AQA Data Aggregation and Sharing Workgroup and Medical Director/Chief Health Officer of HealthPartners, noted that the AQA was established in the fall of 2004 to determine how to most effectively and efficiently improve physician level of performance measurement reporting. Multiple measurement systems currently in the market divert limited resources and focus away from clear priorities to improve care. Multiple measurement systems also create an unnecessary burden for physicians and create confusion among consumers.

The AQA has recognized the need for common standards and rules for health data sharing and aggregation to support a national strategy for quality measurement. AQA's Data Aggregation and Sharing Workgroup further recognized that stakeholders have a mutual interest and common responsibility to promote standard data stewardship activities. This recognition led the Workgroup to undertake the following four AQA-endorsed activities: (1) develop data sharing and aggregation principles, (2) develop a white paper promoting a national health data stewardship entity, (3) establish a Health Information Technology Subgroup to align and apply modern health information technology with the mission goals of AQA, and (4) propose the AQA pilots.

A central theme to AQA and its Data Aggregation and Sharing Workgroup is the need for a uniform approach to measure collection, aggregation, and sharing of data. Dr. Isham discussed three elements that, at a minimum, are needed to promote uniformity and result in effective and efficient quality reporting. First are principles that guide the development and use of health information technology systems and components that support quality reporting (last April, the AQA endorsed principles in this area). Second are standard approaches for EHRs to routinely produce quality data based on measures such as the AQA- and the HQA-approved measures. Third are uniform operating rules and standards for sharing and aggregating health data, implementation guidance, and establishing a framework for collecting and analyzing data (the AQA proposes development of a National Data Health Stewardship entity).

The AQA pilot projects represent one mechanism to advance automation in the short term. These projects leverage the experience of existing aggregation efforts across the country to evaluate the most effective process for measuring performance and aggregating and reporting this information. Each of these six sites have an existing infrastructure, key leaders, and a commitment of local stakeholders. To ensure a more comprehensive view of physician practices, each of these sites will combine public and private information on quality, cost of care, and patient experience to measure and report on a physician practice. The pilots will serve as learning laboratories to link public and private data sets and assess clinical quality, cost of care, and patient experience. It is expected that the pilots, including key leadership from the sites, will provide a national framework for effective and efficient approaches to measure, share, and report the data.

Employer Perspective

Randall Johnson, Director of Human Resources Statistics Initiatives at Motorola, commented that it is now well understood that changes are needed in the U.S. health care system. There is an average $6,300 cost per person today for health care, with that figure expected to reach $12,000 in 2015. Only about 54 percent of patients receive recommended care, and there are approximately 98,000 lives lost annually due to medical errors in hospitals. Despite these problems, progress is being made, with private organizations serving as leaders in moving forward. With this progress comes the recognition that there are differences. For example, some in this area want to move at a slower pace to ensure that the process of reforming the U.S. health care system is as perfect as possible. Others, including most employers, push for much more rapid movement, with the perspective that being "directionally correct," but "imperfect now," is better than being perfect at a much later date.

Mr. Johnson also noted that from employers' perspectives, outcome measures are better than process measures. There is a need to focus on processes that improve efficiencies and reduce misdiagnoses and other errors in careless work. Another significant issue is establishing an EHR in other health information capacities to collect data and disclose performance based on proficiency and quality related to outcomes. This would facilitate moving health information technology in the employee health record forward with measuring and disclosing efficiency.

There also is an opportunity or capacity for: (1) innovative care delivery and payment, such as online visits, group visits, and other type of connections (e.g., telemedicine); and (2) care coordination of chronic conditions, with health information technology in the electronic health record. There should be simultaneous access to the EHR and the systems with diagnosis in appropriate evidence-based care as progress is made in these areas. Mr. Johnson emphasized the need to move forward with implementing health information technology using private demonstrations as well as private/public demonstrations and collaborations (such as the AQA projects).

Quality and Transparency Presentation Wrap-up/Summary

Dr. Clancy stated that a key theme from each of the previous presentations relates to a sense of urgency in moving forward. The presentations also highlighted the large amount of progress and momentum stemming from the AQA and the HQA, both in terms of assessing and improving quality of care, and in having physician leadership at the table. Serious and important questions were raised about the misalignments, or lack of direct alignment/parallel processing between the adoption of health information technology and EHRs and the capacity to make reporting and improving quality of care much more efficient. Dr. Clancy added that failure to act may make things worse as the alliances are coming together around quality measures and understanding the need for uniformity. Lacking some direction, vendors are likely to try to attempt some solutions on their own, which may then in turn create another path for a lack of consistent information.

Discussion Highlights

"We, in many sectors, are not going to have the luxury of asking a highly experienced nurse to do chart extraction as the nursing shortage gets worse and worse, so I would just put that on the table…If we don't get our hands around the cost and quality, [we face] this whole issue of private pay patients going overseas for their care…because it's a lot cheaper and the care quality is perceived to be better."
– Ms. Gelinas

"The issue about clinical and financial documentation I think is well known…How to make those two streams synergistic I think is going to be a real challenge but [is not] not un-doable." – Dr. Clancy

"We've got to look at the technical issues, and we also have to look at sort of the human-cultural-medical practice issues of how you get the sort of mindset to a point where clinical practice matches whatever technological advances you can make." – Mr. Kahn

"I think there's a two-way dialogue that needs to go back and forth around creating the kinds of measures that can be automated and then also automating what you can of what's already there." – Ms. Anderson

"I think we will welcome that challenge to move from the free text format into a template-driven format, because that, too, can be functional at the point of care and not obstructive to the patient-physician interaction if done correctly, and there's evidence of that already." – Dr. Henley

"The more important issues from my standpoint are making sure that these capabilities are focused on actually achieving better care. And in order to do that, one has to have a change of work process within the organizations that are implementing them, which is absolutely critical. And our experience in automating our own medical group of 550 physicians, which is now complete over a multiple-year process indicates that that's the biggest challenge after you find the money to pay for it." – Dr. Isham

“The technology for text searching is hampered by the other issues…there’s no standard nomenclature for how to express…contraindications or findings or symptoms that also challenge text searching, and also that there is a general lack of standards that text searching alone cannot overcome.” – Ms. Anderson

“If one accepts that there is some cultural incentive motivation to do the right thing and financial incentive to be reimbursed for work that’s provided, how do you mitigate the cultural burden of adoption? Our experience in VA, no one minds taking care of patients, that’s what they’d love to do. What they do mind, what they resist, resent, is actually taking care of the patient and then going back in a separate subordinate system to report on what they just did. So that has to be fundamentally integrated into the health record, and this is where I think we’re perhaps underselling what the technologies might do.”
– Dr. Perlin

“Adoption is likely to increase if people see that it’s solving daily problems that they have in front of them right now…We’re in the midst of something of a transformation…where physicians are shifting from thinking about care as one at a time, to being able to look at patterns of care across a population.”
– Dr. Clancy

“I think that the process that the AQA uses…is absolutely critical as physicians through their professional societies use that relationship and that affiliation to become aware of the cultural change and the advantages of a system that points in the direction of better quality of care.” – Dr. Isham

“It’s not a one-way street between the quality community and the technology community, but it’s an interactive dialogue about both what needs to be measured technically, but technically what can be measured and how can we apply state-of-the-art technology.” – Dr. Brailer

“We have, in Indiana alone, 25,000 people in nursing homes...and these are very difficult, extraordinarily expensive populations to deal with…we see an enormous disconnect between physicians and where individuals are receiving their custodial care, and I would encourage this group be put on your agenda…There’s an enormous cost savings opportunity for the state and federal governments in that area, and I think we should look at that both from a quality standpoint and a cost standpoint.” – Mr. Roob

“As we move forward in looking for solutions, I would simply ask the panel to, number one, be mindful of redundancy. Create a quality capture system that will not be independent of electronic health record, but rather, as you demonstrated in your presentation today, will be universally parallel in all that we are trying to capture.” – Ms. Davenport-Ennis

“Awareness of the needs of the consumers is…very present in all the work that HQA and AQA have done.” – Mr. Kahn

“The concern that I have, as we move forward, is I keep hearing a series of what appears to me to be random events…We haven’t stepped back and said, ‘What are the core building blocks? What do we need to do first?’ and get a consensus amongst professionals, amongst regulators, amongst legislators, so that we don’t have this randomness…There are limited resources to implement these things.”
– Mr. Serota

“We need to, at some point, try to integrate all these activities, identify the building blocks, what needs to be done first, get those things implemented…And I think then we’ll get provider confidence to say, ‘Okay. I’ll embark on this journey because I see where it’s headed,’ as opposed to, ‘We’ll go left today, we’ll go right tomorrow,’ which is what worries me about the process that we’re taking.” – Mr. Serota

"At least speaking for the AQA...we have logically tried to prioritize the measures that matter in important ways, be it by condition, efficiency, cost, etc. And I think that consumers, providers, and others have responded to the importance of that prioritization knowing that we need to go forward in a step-wise fashion to make it meaningful and implementable in a very important way." – Dr. Barrett

"My concern is the building blocks that are required to go in a physician's office and in a hospital practice to get those end points, and the fact that we're really not looking at what we need to do, at least I don't see the piece we're looking at. What needs to happen in the practice to accomplish these objectives, and to make sure that we're empowering the physicians and incentivizing them to do the right things first?" – Mr. Serota

"The ultimate goal here is making sure that each patient and the health care providers that support them can get that patient the best quality care at the lowest possible cost, and you have to start somewhere….If we had a more systematic way of capturing data at a low cost for these overall quality measures, we're going to make it much easier to get to that patient focus goal of quality and cost, quality maximization, cost minimization at the level of an overall episode of care. And so that's what we're going to continue to support in Medicare through these privately led consensus efforts." – Dr. McClellan

"Given how difficult it has been to get electronic prescription implemented, [and] the number of prescriptions which are electronically entered today, I'm just questioning how difficult it's going to be to have an electronic system to collect data from a wide variety of quality indicators seamlessly." – Dr. Barrett

"There is a lot of common pain here. Everyone's feeling pain for a different reason and a different manifestation. Employers…[are] feeling wages growing at one-third the rate of their health care costs, and they're feeling the pressure of that, they're feeling the pressure of their competitiveness. The physicians and doctors are feeling the collision that's coming on their reimbursement rates, and as well the pressure they feel to create better quality…Consumers are clearly feeling the pressure of this. They're worried about whether or not their health care will continue, given the price…There is a lot of pain here that needs to be responded to." – Secretary Leavitt

"It's evident to me that we're going to be a lot faster at pulling together methods of being able to create cost transparency than we are at the ability to create quality transparency, because quality is just so much more complicated, and it requires so many more people to have systems, to have implemented standards, but we have to move forward." – Secretary Leavitt

"This idea of a starter set is a very important one, because in my judgment, to use a transportation analogy, what we are building is a go-kart, not a race car. And what we have right now, I think, are a series of parts that are being worked on independently…Now our job is to collectively organize this into some kind of vehicle we can demonstrate can be driven forward… We've got to keep a clear perspective that we're building the most rudimentary system of measuring quality, and cost, and comparing them to create value, and we're going to try to move that forward, and as we do, people will gain confidence, and we'll gain ability, and our capacity to navigate that will increase, and over time we'll get a race car." – Secretary Leavitt

"This fall…the national government will declare that we're prepared to make three very important changes in our behavior. The first is that we will adopt the standards that flow from this body to CCHIT as a pre-requisite of doing, as doing business with federal entities...The second change in our behavior is that we do intend to adopt a series of quality standards…The third thing is that…we will continue to try to find vehicles that can provide incentives for people to make good choices." – Secretary Leavitt

"I have now had meetings with 19 of the 100 largest employers in the country, and I intend to have meetings with the other 81, and beyond, where we ask them, in a similar way, to make the same three commitments this year." – Secretary Leavitt

"I'm going to…explore the creation of…a federation of these local pilots…The first purpose would be the cross-pollination of ideas…The second thing would be the harmonization of what they're doing…And the third thing is to become a chartering entity, if you will, to provide to other cities and other metropolitan areas." – Secretary Leavitt

Formation of a New AHIC Workgroup

Following these discussions, Dr. Clancy outlined three potential next steps for the Community to consider: (1) form a workgroup to address barriers and enablers in the short and long term; (2) prioritize quality measurement and reporting through ONC contractors (HITSP, CCHIT, and NHIN) alone, and/or (3) defer to the HQA and AQA. Based on Community member input, it was suggested that a workgroup be formed with the following draft broad and specific charges:

- ***Broad Charge:*** Make recommendations to AHIC so that health information technology can provide the data needed for the development of quality measures that are useful to patients and others in the health care industry, automate the measurement and reporting of a comprehensive current and future set of quality measures, and accelerate the use of clinical decision support that can improve performance on those quality measures. Also, make recommendations for how performance measures should align with the capabilities and limitations of health information technology.

- ***Specific Charge:*** Make recommendations to AHIC that specify how certified health information technology should capture, aggregate, and report data for a core set of ambulatory and inpatient quality measures.

After the proposed charges of this potential new AHIC Workgroup were presented, Community members engaged in additional discussion, the highlights of which are presented below.

"I think this is absolutely empowering in terms of moving forward to the next step. This is a large plate of work, so I think a discrete Workgroup is important, and I think it begins to harmonize it in a very public and open forum that creates the harmony with the capacity for the inputs and results, and a network that can really operate." –Dr. Perlin

"[AHIC] needs to take a more aggressive position than waiting for others to act and hear what they're doing. So I support a Workgroup." – Mr. Green

"Clearly there's some important overlap with some of the existing Workgroups, whether it's on electronic messaging or other aspects of health IT…So this is right time for this effort, and I think there's enough there that really needs to bring in and integrate the AQA, HQA perspectives more. And I think a Workgroup could help do that." – Dr. McClellan

"I read a lot of overlap with CCHIT in this effort…so I would just say, from a Workgroup standpoint, make sure that it's tightly aligned with efforts that are going on in CCHIT." – Mr. Hutchinson

"If indeed we are trying to move to quality measures and reporting of same, in order to improve health outcomes, and health care in the United States of America, consumers will ultimately be challenged to accept what is produced through this broad charge and the specific charge if indeed they look at

specialists in the world of quality as those who helped to author those very steps that will influence their life so directly." – Ms. Davenport-Ennis

"The place where I see the AQA and HQA standards taking real root fastest are in these pilots. And it would seem to me there'd be value in taking the starter kit and saying, 'Make this work.' And once you have made the ones we've agreed upon work, and we started these pilots, and then we proliferate the pilots…once we have figured out how to do this on the starter set in a limited number of areas, it will proliferate fast, and it will broaden fast." – Secretary Leavitt

- Following this discussion, Dr. Brailer declared consensus on formation of this new AHIC workgroup, which will operate under auspices of the broad and specific charges presented to the Community.

Nationwide Health Information Network

Dr. John Loonsk, ONCHIT, provided an update on the NHIN, an initiative designed to foster widely available services that facilitate the accurate, appropriate, timely, and secure exchange of health information. The Network has been collaborating with a variety of different groups to forward its mission. Those groups include four main consortia that have been working on architectures as well as on prototypes that will validate those architectures and demonstrate activities in these areas. These consortia have developed several architecture products, including standards, services, and functional requirements needed to advance the NHIN. Dr. Loonsk described functional requirements in this context as statements about what the systems need to do to accomplish NHIN's mission. Three public fora on the NHIN have been scheduled. The first, on functional requirements, was held in June 2006. The second forum, on the topic of security services and systems, is planned for October 2006. The third forum is being planned for January 2007, and will include a demonstration of the prototypes that have been developed, as well as discussion of business models and other steps necessary to move forward.

Much of the consortia's immediate focus has been on moving forward with software development and in specifying—in the form of functional requirements—necessary behaviors of the system or systems that need to participate. Dr. Loonsk indicated that an example of a functional requirement would be: "The record locator shall return the location of data in health care provider systems." This simple statement is not intended to be a policy statement, but rather a statement of fact that can be agreed on in the context of establishing and implementing systems and services.

In the context of a forum and the other NHIN activities, policy implications are being identified and will be advanced through a variety of working groups. Work being carried out by HITSP, AHIC, the National Committee on Vital Health Statistics (NCVHS), and others focuses on policy implications. In conjunction and in parallel with these activities, the NHIN is working on technical implementations. Dr. Loonsk explained that these activities are not at the point of drawing network boundaries. The NHIN is considering requirements ranging from those related to electronic health records, to a regional network, to a national network, in the context of trying to be concrete in functional requirements about what needs to be specified.

The goals of the first NHIN forum, held in June 2006, were to: (1) review functional requirements work to date (considering more than 1,100 requirements), (2) obtain a broad spectrum of input, (3) increase awareness of challenges in advancing the NHIN, and (4) produce comments, gaps, refinements, and issues for the NCVHS. Common requirements were identified and architecture variations were described. It is anticipated that the NCVHS will produce an initial set of functional requirements that will be

available in September. Materials from this forum are available online (www.hhs.gov/healthit/NHIN_Forum1.html). The June NHIN forum also included discussions on reconciling some of the expectations individuals and organizations have for the Network with practical issues being faced by the four consortia as they work toward the development of initial prototypes (the initial prototypes will be focusing on three use cases).

Dr. Loonsk engaged the Community in an exercise involving the representatives from the four NHIN consortia: Garret Wu (Accenture), Dr. J. Marc Overhage (Computer Sciences Corporation), Casey Webster (IBM), and Dr. Robert Cothren (Northrup Grumman). These individuals, along with Community members, proceeded through a series of discussions that reflect significant issues being considered by the Network.

Question 1 – Incremental Development

- NHIN services will develop incrementally as they mature and demonstrate value. In this kind of "organic" development, what architectural considerations are necessary to deal with: (1) differing emphasis and capabilities in different regions, and (2) providers without EHRs who want NHIN services?

"The complexity of our health care 'non-system' really creates these challenges. It's a complex, adaptive system that you have to accommodate in the architecture…At the end of the day the question is about how you put the different components together…creating the data standards and message standards and authentication authorization standards that allow those difference pieces of the infrastructure to interact is the critical architectural component."
– Dr. Overhage

"I think the value of the Network comes because of the data…it's really primarily about moving the data around in a way that is interpretable and usable that unlocks the value of these different services and so on that exist within the environment." – Dr. Overhage

"Laboratory results, which are so important for so many of these functions, are some of the most readily available data, because they're already captured in structured form in most places, in organizations that have extensive support infrastructure, therefore it's a natural focus for many markets is to work with laboratory data early on. So I think that we will see that commonality emerge, and again, at the end of the day there's only dozens of those types of data to chase down, and so it won't take that long for us all to get to the same place." – Dr. Overhage

"In listening to this incremental development concept, I just wonder at how much of the puzzle has to be filled in before we really can have confidence that the value will be demonstrated? If we have to get the entire puzzle done, that's probably going to be very difficult. Do we have a sense of where we go first to get the most early win on value and how complete do we need to be before we can reassure everyone that, yes, this is really going to pay off?" – Dr. Gerberding

"There's work on going in the business case that hopefully will answer that question more explicitly in all four of the consortia." – Dr. Overhage

"In some respects the use cases have provided that focus and that's where this potential conflict between regional variation and national consensus or coordination around a particular area perhaps, comes into focus...one of the core functions that most of the consortia have addressed is around looking up data, and this a common function for all of the different consortia and one yet where there are some architectural differences." – Dr. Loonsk

"If you take the data elements that you need to support the AQA quality measures as one example, and make a list of those, and you categorize those…there are indeed those categorizes of data that underpin almost all of the quality measures, and then there's the other category that are the more challenging things to capture in most settings, either because the clinician captures them as free text that they've dictated, or because they simply don't record it because it takes too much time and trouble." – Dr. Overhage

"The first step is to decide what you're going to measure, and that's been done on the starter kit. The second is to set a standard on how you define quality in that area, the third step is to figure out how you're going to gather it and measure it, [and] the next step is to determine how you're going to automate that process…how do you communicate that between the hospitals, and how do you communicate it between regions?" – Secretary Leavitt

"It's pretty easy to measure whether or not somebody got a drug, or whether or not they had a certain lab result. The question is…should they have if they didn't, and shouldn't they have if they did?"
– Dr. Brailer

Question 2 – Information Retrieval

- There are several models for retrieving patient information in the existing NHIN consortia, via: (1) a patient directory that also uses summary data in a regional repository, (2) a patient directory that includes information on what kinds of data can be found at different organizations, and (3) a patient directory that exclusively indicates that patient data exist at an organization, but with no indication of what those data are. When a clinician receives patient data from another organization, what are the functional, performance, and sensitivity issues associated with each approach?

"We didn't want to take the data out of its point of origin and that's for good security reasons, as well as avoiding unnecessary redundancy and the sheer magnitude of data. So, largely what we have is the ability within our connected communities to search for and retrieve data, and in that there's these three different approaches that can be taken and other flavors thereof. One is the idea of taking summary data extracted on the fly and [having it] moved up and associated with each patient…Another advantage to that is it does provide some level of redundancy which would help in a case of a Katrina or another type of disaster, there would at least be some data available…Another approach to that, or one that's actually working in parallel, is to have pointers to all of the data documents and to capture those pointers."
– Mr. Webster

"We anticipate that this is one of the issues that the prototypes will attempt to reflect, and that we will have ongoing discussion about these different architectures throughout the year, and for some time to come…There are issues about performance and data accessibility, and physicians willingness to wait for data to come in association with a patient that are prominent in that consideration as well as others."
– Dr. Loonsk

"Certainly performance and usability are key towards the desire to use some of those, but then willingness again to expose data is the counter to that, and the people who do counter that understand what it is they're trading off, it's really a philosophical as to technical difference and the technical implementations are not particularly difficult, we all understand what it would take to do all of them." – Mr. Webster

"We all use some variance of [master patient index] capability with matching based on name, date of birth, gender, address, phone number, all the types of things that would help to identify us as well as other identifiers we have that we can use such as…insurance numbers, so the more of those you can match, the better. The real question is at what point does it become a positive match? And it is all a percentage game, but at some point you reach that threshold." – Mr. Webster

Question 3 – Emergency Response

- In the Gulf Coast aftermath, when an entire region had seriously degraded infrastructure, the ability of electronic prescribing networks and the Veterans Health Administration systems to retrieve data about evacuees was put on display. Could the existing NHIN prototype architectures have responded to this crisis in this way? What architectural approaches could enhance NHIN capabilities to respond?

"The requirements in design for the prototype architectures could certainly have supported the response to the crisis, such as the one that we had in the Gulf Coast. We've got designs for an NHIN that's Internet-based, it requires high availability and redundancy for disaster recovery and tail over. The [purpose] of the NHIN is [to] link disparate health care information systems together to allow authorized user access across the nation, so that includes patients, providers, hospitals and other public health agencies, to share clinical information that's appropriate and that's secure." – Mr. Wu

"The NHIN is only part of the solution. We're talking about an NHIN that's in a federated model, the data isn't centralized in other locations, such as something with the VHA, so from an architectural standpoint we need to consider provider organizations' capabilities, their business continuity and disaster recovery plans…I think the key to all of this is the harmonized standards so that what provider organizations have as far as their data, and what are their availabilities, and what is their ability to store the data, is standard across all of those organizations, so the information is useful as the information is transported throughout the NHIN, and as it's required for an emergency response situation." – Mr. Wu

"How do you want to store that data, and where do you want to store that data? There's a whole series of questions that arise based on what those decisions are…the technical aspects of what are things we all understand and can build to, but it's really what are the policies and the business decisions…do you retain the data in a federated model, do you have it in a centralized model, or do you have some hybrid of the two?" – Mr. Wu

"The data that is collected, which is very sensitive and aggregate, in terms of privacy can be literally put into a single database for a market, or it can be indexed in a way that it can be retrieved, but you go back to the original sources for the database. That second approach is called the confederated model, versus the centralized model." – Mr. Rishel

"The key is how much is exposed from a given organization and for, depending on the organization, I think the model may have to accommodate different types of organizations with different capabilities so an individual provider who isn't buying from a service may want to take advantage of essentially a backup plan that the NHIN might offer; whereas, a large health care organization may choose not to…So, most likely there will either be a service that will offer it for the smaller providers or the NHIN itself will, but it won't necessarily require it from all of the participants." – Dr. Kolodner

Question 4 – Patterns of Information Exchange

- At least two major patterns of information flow have been discussed as components of an NHIN architecture:
    - Pull: Clinicians retrieving data from the network at the time that they want to retrieve them.
    - Push: Data (such as lab reports, referrals, and public health data) being sent to an EHR or data user as soon as they are ready.

  What are the architectural issues associated with the two different approaches?

“One can easily imagine a world, or at least an NIHN world in which you really can achieve all of your functionality through a pull, that you can very simply say that ‘I want to know information on John Smith, get me that information.’ To a certain extent that may be somewhat naïve approach in that there are several issues in use cases that are very compelling to suggest that a pull model is not sufficient and that a push model makes a lot more sense.” – Dr. Cothren

“In a pull model [for example], the regional, or state public health department at 2 a.m. every night, says, ‘tell me all of the lab results that you got today,’…On the other hand, a push model would be where all of the responding systems send to public health things that you said you were interested in, so that’s the trade-off that we’re looking at.” – Dr. Cothren

“When we look at push and pull models, we’re also starting to deal with the workflow issues of the clinicians…there are workflow issues that can be facilitated or might need to be changed, depending on what model you implement and where.” – Dr. Cothren

“[This] discussion is compelling and of great interest to patients and the United States…As we’re developing those systems that will allow the exchange to be functional for physicians through EHRs and EMRs…keep in mind that we are at the same time trying to have PHRs developed for the consumer, as a consumer-driven and led initiative.” – Ms. Davenport-Ennis

“This issue of how we identify the patient and whether it’s [a] push or pull model will play into some of the privacy and security concerns that the new Workgroup will begin addressing and then help to shape…how do you support a patient opt out, where can they block information, or some of their information, so I might not release information from oncology, a center that only does oncology care, or psychiatric care? Because just registering that, knowing that there is data there already reveals information without even saying what kind of data [they are]…The other is the possibility of patients saying ‘I really want to make sure my data is available’ and having a voluntary ID type that could be added in without any requirement and ensuring that my data has a better chance of matching up because I choose voluntarily to add that in.” – Dr. Kolodner

“We’re optimistic that we can achieve the goals that have been established here, we’re working very closely with our distinct health markets, with Dr. Loonsk and ONC and with the other consortia, so it’s definitely been a very collegial environment, and I think one in which we’re cooperating for the good of the nation.” – Mr. Wu

“I’ve truly been amazed at the amount of excitement that we see out in the community, and I wouldn’t say that that’s just among the health care markets that make up our own consortia, but people looking at this effort and saying, ‘We’ve been talking about doing this for a long time, we actually see action now, there’s really something that’s moving forward,’ and that given those circumstances I don’t know how we could keep from being successful, I really don’t.” – Dr. Cothren

“Certainly on behalf of IBM and our communities, we’re extremely optimistic…What I really enjoy is that I’m going down to our community partners and they’re absolutely excited about this, these are groups that, whose IT plans are 3 to 5 years out. They don’t plan anything less than that. And they’re dropping their current IT plans aside.” – Mr. Webster

“The Connecting for Health Collaboration shares that optimism, but with a note of caution that we do have not only the hard technical work, but I think some other hard work as far as policies and processes and so on to develop over the coming months and years that will enable that technology to really reach its promise.” – Mr. Rishel

The most important thing that could happen…is establishing standards, and taking a very hard approach to say, 'We're going to be prescriptive on some of these standards, and associate, carrots and sticks with that.' Because until we get to standards, the data that we start to collect really isn't going to be as useful as we'd like it to be…But as we start to establish the standards, a lot of them are already out there, and we just need to drive acceptance of them…And then drive from there to get to the point where we can start to really leverage the data that we're collecting as part of EHRs, and use it in much better ways for quality, for outcomes analysis, for trials, all of those capabilities." – Mr. Wu

"In September, [the NHIN is] going to have common requirements coming from NCVHS that will be recommended to the Secretary around the common aspects of all this work, as well as some description of some of the architectural differences...in October, we're going to have the second [NHIN] forum, and that will focus on security and on systems issues…the different consortia are also working on cost and revenue models...We're going to tie that into some of the work that's going on at regional and state levels in terms of trying to coordinate so that we have coming out of this overall, some costs and revenue models that can suggest how overall networking can be advanced" – Dr. Loonsk

"In January…[the NHIN will] have tangible software that…demonstrates the kind of concepts here, recognizing that it will be a first implementation, prototypes, if you will, but of connecting live systems and showing the ways in which these different capabilities can be brought to bear to move health information to support those goals." – Dr. Loonsk

Due to time constraints, discussions related to questions focusing on consumer needs, a trust model, secondary uses of data, and transforming data were tabled.

Looking Forward: Goals, Objectives, and Strategies

At the last AHIC meeting, Dr. Brailer reviewed the AHIC strategies that were classified as "initiated," (i.e., they are underway and there are specific, tangible actions being pursued under active management by ONCHIT). Community members were presented with six strategies that are classified as being under "active consideration," meaning that there are not specific sets of tasks are underway, but these strategies are viewed as being the next round of large issues for the Office to focus on. Dr. Karen Bell, Dr. Loonsk, Jodi Daniel, and Kelly Cronin provided an overview of the following strategies under active consideration by AHIC (a presentation of each strategy was followed by discussion periods). Secretary Leavitt excused himself from the meeting during these discussions—in his absence, Dr. Brailer chaired the meeting.

- **Strategy 1.2.1: Foster economic collaboration for EHR adoption** (under Goal 1: Inform Health Care Professionals, Objective 1.2: Low Cost and Low Risk EHRs). Hospitals, public health agencies, and health plans are interested in supporting physician adoption of EHRs. Yet, they face legal and practical barriers to this type of collaboration. Policies that allow such collaboration when not contrary to public interest would increase health information technology uptake.

"What the physician community tells us, not infrequently, is that…they want to do it their way and with their systems. And their systems being institutional-based do not fit well in the ambulatory care arena in terms of their functionality and so forth…the challenge would be for hospitals, public health agencies, and health plans to work in concert with the ambulatory physician community and other ambulatory providers to determine what fits best at the interface of patient-physician connection at the point of care, and let's determine what the best system is for that environment versus 'one system fits all.'"
– Dr. Henley

“It’s amazing to me to see hospitals beginning to compete on having IT systems in place, and I just wonder if we’ll be able to work through that issue. But I don’t think we should be competing on saving lives, at the end of the day. So, just that notion of business case and competition, having you address some of that would be really helpful.” – Ms. Gelinas

“I think there’s a business issue here…even if they’re in the medical arts building across the street, why am I giving this to them, I mean, when you get down to it? And so I think there’s got to be more thinking about answering that question, which I thought was a no-brainer, just conceptually, but when I started talking to hospital people who were actually on the ground, their answer was, ‘Now, tell me that again?’ – Mr. Kahn

“I know there was also a big push to make sure that we’re looking at all entities that could provide low cost, low-risk EHRs, and one of those being labs, in the sense that they already have connectivity to physicians today, they have relationships with physicians today. I don’t know if that ended up in the final Stark wording, but if not, we should be looking at entities that have relationships, especially electronic relationships today, that could provide these low cost, low-risk EHRs, assuming low-risk means they’re looking at certified EHRs that have gone through the process.” – Mr. Hutchinson

- **Strategy 1.2.2: Lower total cost of EHR purchase and implementation** (under Goal 1: Inform Health Care Professionals, Objective 1.2: Low Cost and Low Risk EHRs). The costs of EHRs are high because a large amount is spent on custom integration and accessing non-standard information systems. Also, the cost of consultants, training, and implementation of these specialized systems is high. In addition to allowing disparate parties to collaborate in installing EHRs, efforts that lower the total cost of ownership will enable many providers to use these tools.

“A better selection process on the front end is extremely helpful to the process…The other part of the equation is the ability to allow physicians to provide comments on the system they have installed, so that others who wish to get into the market can see those comments in terms of is the system performing as it should have performed…So looking at the front-end process as well as providing some post-implementation feedback that others can see before they write the check can be very powerful.” – Dr. Henley

“When you get into a six-physician practice, in many instances you are actually automating six different workflows within that same practice, and where a lot of money is spent, and time and energy is spent in that implementation is educating the practice and the physicians, not to try to take the workflow you’re used to today and simply automate it, but improve the workflow and do some standardization to that workflow.” – Mr. Hutchinson

“If we have an education and awareness with some best practices or examples, whether it be family practitioners or Ob. Gyns, there are definitely some patterns by specialty of workflow that could work, but we do spend a lot of time, money, and effort trying to customize these systems to meet existing workflow patterns.” – Mr. Hutchinson

- **Strategy 2.2.1: Stimulate private investment to develop the capability for efficient sharing of health information** (under Goal 2: Interconnect Health Care, Objective 2.2: Sustainable Electronic Health Information Exchange). The United States lacks the capacity for widespread and low-cost health information sharing. There is nothing in health care similar to the carriers that operate and compete in telephony or broadband. To develop this capability in health care, a common technical architecture and substantial private sector investment is required. These will together create supply side entry of offerings that will in turn allow more hospitals and physicians to access these tools.

“The actions that you’ve seen happen recently with respect to health IT all emerged from a set of strategic planning that occurred about 2.5 years ago. So this process of reloading and beginning to true up these next ones with themselves will result, hopefully in a set of very specific actions, hopefully less than 2 years from now. But this process is really the key steering wheel in the direction that policies will go.”
– Dr. Brailer

“The situation that we’ve faced in the home ownership area, and student loans…there was a public interest that was deemed to be large enough at the time by the members of Congress to help facilitate some lending under the government purse to…stimulate market entrance, and to drive down interest rates. So there are other models out there, [they are] not a clean fit, but it’s at least something to consider.”
– Mr. Cresanti

“The wording here describes what might be a public utility type of approach that might or might not be regulated. Another approach…would be an organization where the entities come together and collaborate to share that infrastructure. The model of that is Visa, where the bank owns something and that infrastructure is not a source of profit. So you’re not draining dollars away, but you’re actually cutting the cost of that, and that might be something that, in health care, we might be more attracted to.”
– Dr. Kolodner

- **Strategy 2.2.4: Support state and local governments and organizations to foster electronic health information exchange** (under Goal 2: Interconnect Health Care, Objective 2.2: Sustainable electronic health information exchange). Health care continues to be delivered locally and regionally, and it is difficult for a top-down federal solution to meet the needs of America’s diverse communities. Many states are developing strategies to foster health information exchange, but local and regional efforts are also occurring as well. States have unique laws that affect privacy and security, licensure, practice of medicine, insurance, liability, and have a natural interest in improving health care for their citizens. Therefore, the states are the natural units for health information exchange customization, and should be supported and guided in this new role.

“You mentioned last time here on the issue of privacy and security that there would be a meeting later of the NHIN contractors that would be a public meeting. What’s the schedule for that?” – Mr. Cresanti

“It’s October of this year. There will be a forum focused on security issues, and we will just be getting in some interim reports from those state contracts from the health information security and privacy collaboration contracts at the state level, so hopefully we’ll be able to take some of the learnings from those interim reports and share them at that forum. So there will hopefully be a connection between the NHIN folks and the privacy and security folks.” – Ms. Daniel

“One of the real important things going into this recognition that states are accountable for these issues is that we need to really much more proactively engage them…One experience that we’ve had that’s been particularly helpful in really tough issues around statutes and tough laws in the states where the emotional level can be very high has been in the public health preparedness law arena, and one of the things we did was to create a Center of Excellence in Public Health Preparedness law that was in an academic environment, but it went to every state and analyzed where [they] are now in the continuum of relevant regulations and statutes.” – Dr. Gerberding

“One of the reasons this strategy is being queued up now is it’s becoming apparent that we’ve lacked the vehicle to convene states or local entities on a broader basis with health IT…we’ve had to build the dialogue to have it and it has incredible lead time to be able to have anything substantive come out.”
– Dr. Brailer

"I'm anxious to see…what CMS says I can and can't do as essentially the administrator of those programs and that will have an enormous impact in terms of states' willingness and ability to be your partner on this. In terms of the Medicaid infrastructure, most of the time when governors look at health, they're concerned about public health but they were more concerned about their budgets and they're going to think about Medicaid and the Medicaid managed care infrastructure and how that ties into this." – Mr. Roob

"Integrating the state Secretaries of Health into the decisions [would be helpful]. State Secretaries of Health are usually charged with oversight and bringing forth to the governor those ideas that are going to be used to improve the health care delivery system for the entire state…involving the National Governors Association, National Association of Insurance Commissioners and then working with each of them at the state level is also another favorable process…I would certainly encourage that we reach out to mayors of major cities in this United States and look at the models that they've already established around public, private, non-profit partnerships such as those." – Ms. Davenport-Ennis

- **Strategy 3.3.1: Establish value of personal health records, including consumer trust** (under Goal 3: Personalize Health Management, Objective 3.1: Consumer use of Personal Health Information). Personal Health Records (PHRs) are in the early stage of development, and no standard exists today to ensure that they meet a minimum set of requirements. Additionally, PHRs today are generally not linked to the clinical information within EHRs, requiring extensive manual data entry and knowledge of particular details of medical information. Although PHRs have the capability to give consumers better control over their care, consumers have no history from which to assess whether they should place their trust in PHRs.

"We don't want to be too prescriptive…it would be, I think, a disadvantage to try to force the structure too much in one direction this early in the process...there's a lot of people looking at what entity would be most trusted to house a PHR. That's a question that's not truly answerable because what I trust, an entity I trust, is possibly different from an entity that you would trust and I think if we let the consumer choose based on information, let the marketplace offer these items and within guidelines of the standards, that we're more likely to get there quicker and let the market decide." – Mr. Green

"There [are] a lot of privacy issues that need to be discussed, particularly since a number of the PHR vendors are not covered entities, and I'd be concerned about establishing the value before a lot of the infrastructure is built…once you get to a certain point it will help sell itself to some extent, but if you establish a value and promote it more quickly than the infrastructures there, you could create some additional problems that'll set it back a number of years." – Mr. Trenkle

"Somewhere in here, whether it's an objective, a strategy, or a goal, we need to deal with the overall communication strategy about what we're doing, as it is relevant to consumers and probably health professionals as well. I'm finding it very difficult to talk about this outside of people who are very intimately engaged in these issues, and yet I think this is so exciting, and so important that we bring consumers along with us as we go in a more transparent way that I'd like to see that reflected in our strategic plan." – Dr. Gerberding

"There's been a substantial amount of investigation into consumer communication around health IT, and I think it's fair to say that the composite of that is, that it's very early to take messages out to consumers, but I don't think we shouldn't try." – Dr. Brailer

"On January 1st, 2007, 630,000 Medicaid recipients in Indiana will have an opportunity to have a PHR. So, we'll be talking a lot about it in the next couple months, at least in our state, and then I think you'll

see in some other states…go down this path because it is fairly easy to do…we'll tell you how it goes in February." – Mr. Roob

"I still am a big believer that the PHRs could follow a very similar path as electronic banking followed…I think in getting to the consumer trust piece of the PHR, obviously the providers of care in that point are this equivalent to banking entities in the electronic banking world, where a provider, whether it be a physician, or a pharmacist, or a hospital basically says, 'I work with the following PHR systems.'"
– Mr. Hutchinson

- **Strategy 4.2.1: Develop patient centric quality measures based on clinically relevant information available from interoperable longitudinal electronic health records** (under Goal 4: Improve Population Health, Objective 4.2: Efficient Collection of Quality Information). Much of quality measurement is currently provider focused—to assess performance of individual providers on a limited number of metrics. Most of health care dollars, however, are spent on patients whose care spans multiple providers and settings. As interoperable health information becomes available, there will be the ability to assess care at the patient level across the continuum of care. This will allow tremendous opportunity for systemic improvement in our health care delivery system, supported by more informed public policy and decisions.

"You have to proceed with care here…[there] is a potential for overlap with AQA and HQA as they proceed, because here you're really looking not just at the process, but at actual measures—or future measures." – Mr. Kahn

"How do we start priming the pump for beginning to make use of the data that is available on electronic systems whether it's because of natural language processing, or because of the ability to use decision support to begin helping us prompt through more structured data? It's really maybe opportunity assessment here, that dovetails back into that effort of how we measure what's clinically meaningful."
– Dr. Brailer

"I think the providers are sensitive about this, but I've seen it argued that you can already do what you have in mind here, to some extent, with administrative data, and there's going to be a movement, I think over time, and you've got to think about how that works, versus how this works" – Mr. Kahn

"I think there's two points to this…one is that issue of continuum of care measurement…the other one is this idea of the opportunity assessment of making sure that the IT community itself, and those who are installing these systems, begin thinking about what we can do with the data that's made available from a quality perspective. I think there's a sense of dependency, that the quality community, the clinical standards community, will just tell us what to measure, and I think the discussion here is more along the lines of how do we motivate more entrepreneurialism in that community to begin innovating things that are data-based outwards." – Dr. Brailer

"As soon as you get standard or open interfaces and common communication protocol, then you can do all sorts of good stuff. We are so far from having common interfaces and communication protocol that…the stagecoach is way ahead of the horse on this one." – Dr. Barrett

"One key resource for the staff [is] the new Institute of Medicine report that just came out on performance measurement. It has some really good work in here on starter sets, design principles, how to go about achieving this. We found it very helpful in the private sector and just wanted to make sure that came to your attention." – Ms. Gelinas

Public Input Session

Speaker Number 1 – Carol Bickford, of the American Nurses Association, commented on some of the AHIC strategies for active consideration. She asked the Community to be broader in its interpretation of Strategies 1.2.1 (foster economic collaboration for EHR adoption) and 2.2.1 (stimulate private investment to develop the capability for efficient sharing of health information) and change the term "physicians" to "clinicians" to create a more open perspective.

Ms. Bickford also suggested that AHIC consider reaching out to the National Foundation for Women Legislators within the context of Strategy 2.2.4 (Support state and local governments and organizations to foster electronic health information exchange). She noted that the Foundation is a bipartisan, all-government level group that may serve as an important resource in helping move AHIC's agenda forward.

Closing Remarks

Before adjourning the meeting, Dr. Brailer thanked Community members for their attendance and participation, reminding them that the next AHIC meeting is scheduled for September 12, at 8:30 a.m.