

**American Health Information Community**  
**Workgroup on Electronic Health Records**  
Summary of the Web Conference Held Tuesday, May 2, 2006  
(5<sup>th</sup> Web Conference of This Workgroup)

**Charges for the Electronic Health Record (EHR) Workgroup**

**Broad Charge:** Make recommendations to the American Health Information Community (the Community) on ways to achieve widespread adoption of certified EHRs, minimizing gaps in adoption among providers.

**Specific Charge:** Make recommendations to the Community so that within 1 year, standardized, widely available, and secure solutions for accessing current and historical laboratory results and interpretations are deployed for clinical care by authorized parties.

**1. Call to Order – Ms. Lillie Smith-Gelinas and Dr. Jonathan Perlin**

Ms. Gelinas called the Web conference to order shortly after 1 p.m. and noted that she would be chairing the meeting with Dr. Perlin.

**2. Introduction of Participants**

Meeting participants were introduced. (See the list of participants at the end of this document.)

**3. Introductory Remarks – Ms. Gelinas and Dr. Perlin**

Ms. Gelinas and Dr. Perlin explained that although there was no formal agenda for the day's Web conference, the intent was for EHR Workgroup to do the following:

- Review and come to a consensus regarding the Workgroup's letter and recommendations to the Department of Health and Human Services (DHHS) Secretary Mike Leavitt regarding the EHR Workgroup's specific charge of making current and historical laboratory results and interpretations electronically available for clinical care by authorized parties, with the goal of presenting them to the May 16<sup>th</sup> meeting of the American Health Information Community (AHIC; The Community)
- Hear presentations related to the information needs of first responders so that the Workgroup could begin to address the Secretary's charge to the Workgroup, making recommendations to ensure that the critical health information that first responders need in disasters or emergency situations can be made available electronically.

Ms. Gelinas and Dr. Perlin reported that Dr. David Brailer has resigned as the National Coordinator for Health Information Technology, and they thanked him for his excellent leadership. They added that they were very pleased that he would continue to play an active role in The Community. Ms. Gelinas and Dr. Perlin also expressed their appreciation to the EHR Workgroup and the Office of the National Coordinator for Health Information Technology (ONC) for their hard work and contributions.

#### **4. Introductory Remarks – Dr. Brailer**

Dr. Brailer prefaced his remarks by thanking EHR Workgroup members for their hard work and Dr. Perlin and Ms. Gelinas for their leadership of the Workgroup. He stated that the EHR Workgroup had really set the benchmark in terms of making progress on its charges while balancing both policy and technical issues and long- and short-range issues.

The upcoming May 16 meeting of the Community, Dr. Brailer explained, will be a major event where The Community moves from the thinking phase about what to do, to the very specific action phase. The Community will do three things with respect to the EHR Workgroup's work:

1. Listen to the EHR Workgroup's recommendations about near-term breakthroughs in making lab data electronically available (the specific charge). The Community will take one of the following actions with respect to each recommendation: endorse it, modify it, or send it back to the Workgroup for further consideration.
2. Provide guidance on any difficult issues that the EHR Workgroup would like the Community to help it with.
3. Give the EHR Workgroup a glimpse of where it will be going after May 16. After May 16<sup>th</sup>, the focus will shift to the EHR Workgroup's broad charge related to the widespread adoption of certified EHRs. That pace will be slower than the frenetic pace required to meet the 1-year deadline for the Workgroup's specific charge.

#### **5. Review and Discussion of Draft Letter to Secretary Leavitt – Dr. Perlin and Dr. Karen Bell**

Dr. Perlin indicated that the first item of business would be to review and come to a consensus on the EHR Workgroup's draft letter and recommendations regarding its specific charge to be presented to the Community on May 16. He stressed that the discussion should be limited to the intent of the recommendations, not the editing, which would be done professionally once they had agreed upon the intent.

Dr. Bell explained that the draft letter and recommendations distributed to EHR Workgroup members for review at this Web conference was a little different from the previous letter. Workgroup members had given the ONC staff permission to format the letter consistently with the formatting of the letters from the other Workgroups. In addition, the ONC staff had obtained additional information on the Clinical Laboratory Improvement Amendments of 1988 (CLIA) options and Health Insurance Portability and Accountability Act (HIPAA) regulatory requirements. The staff had worked closely with the other Workgroups on the privacy and security recommendations, so those recommendations had changed in the letter, as well.

Dr. Perlin asked the EHR Workgroup to review each of the three major sections of the letter. The first section identified six broad issue areas related to the EHR Workgroup's specific charge related to the widespread adoption and availability of electronic laboratory results. The second section, "Background and Discussion," presented context for how these issues might be addressed to enable widespread access to current and historical lab data in a patient-centric fashion. The third section presented 10 recommendations, with introductory paragraphs, organized by the six broad issue areas.

##### ***A. First Section: List of Six Major Issues***

Dr. Perlin first asked for agreement that the list of six major issues in the first section of the EHR Workgroup's draft letter to Secretary Leavitt reflected the body of the letter. He noted that the issues had not changed, with the exception of the addition of Issue #5, related to the alignment of business cases;

1. *Provider- and patient-centric models*: Necessary steps in the migration from a provider-focused system to a patient-focused system with respect to the flow of laboratory information.
2. *Standards*: Urgent need for endorsed, adopted, and interoperable vocabulary, messaging, and implementation standards for laboratory results and data exchange.
3. *CLIA and HIPAA options*: CLIA and HIPAA regulations, which present potential barriers to electronic laboratory results data exchange in a patient-centric manner, particularly in more stringent States.
4. *Privacy and security*: Technical considerations relating to privacy and security with respect to patient and provider authorization and authentication, including accurate patient identification and linkage to patient-specific information.
5. *Advancing adoption*: Aligned business cases for the multiple stakeholders involved.
6. *Assessment, monitoring, and research*: Assessment, monitoring, and research of early adopters' experiences and identification of best practices.

Mr. Houston said he did not recognize Issue # 1. Noting that some State laws specify that the health care provider is the custodian of the record on behalf of patient, Mr. Houston said he wanted to understand whether the EHR Workgroup was advocating an information system over which the patient had total rights or a system structured to allow information to be available for patient care purposes, regardless of where a patient is. Mr. DuBois said the idea was that the information was moving toward the regional health improvement organization (RHIO) model – and he thought that “migration” was the perfect way to say it. Ms. Gelinas stated that although Issue #1 in the letter talks about “the evolution from a provider-centered model to a patient-centered model,” she personally thinks both models will continue to exist. Ms. Pure agreed. Dr. Perlin noted that getting the information to follow the patient is a goal. Ms. Gelinas was in agreement with Dr. Perlin, noting that having a patient-centric system did not eliminate the need for a provider-centric system.

Dr. Perlin said he thought there was consensus in spirit, if not in words, and asked Dr. Bell to work on the language to capture the idea that the provider-centric view is not eliminated by a patient-centric view.

**DECISION:** The ONC staff will work on the language for Issue #1 so that it does not imply that the provider-centric view is eliminated by a patient-centric view.

## ***B. Second Section: Background and Discussion***

Mr. DuBois, as he had at the previous meeting, recommended rephrasing the sentence that says, “Most labs will only provide results to the ordering clinician,” to say, “Labs are only permitted to provide results to the ordering clinician.” There was no objection.

**DECISION:** The ONC staff will modify the sentence on page 3 of the background section of the draft letter to Secretary Leavitt to say, “Labs are only permitted to provide results to the ordering clinician.”

## ***C. Third Section: Key Recommendations***

Dr. Perlin asked for comments from EHR Workgroup members on the draft language for 10 key recommendations in the six key issue areas in the third section of the EHR Workgroup's draft letter to the Secretary Leavitt.

## 1. Recommendation on Provider- and Patient-centric Models

The EHR Workgroup considered the following draft recommendation:

**Recommendation 1.0:** HHS should take immediate steps to facilitate the adoption and use of endorsed standards and incentives needed for interoperability of lab results within the current provider-centric environment. ONC shall work with multiple stakeholders to develop a detailed work plan to achieve patient-centric information flow of laboratory data in 2007.

### Discussion

Dr. Carolyn Clancy suggested adding a deadline for the completion of the workplan to achieve patient-centric information flow. Dr. Worzala asked if there would be more specificity about what is meant by “incentives.” Dr. Bell explained that the specificity appears in Recommendation 5.0 related to the business case.

**DECISION:** In Recommendation 1.0, set March 31, 2007, as the deadline for completion of the workplan to achieve patient-centric flow of lab data.

## 2. Recommendations on Standards

The EHR Workgroup considered the following draft recommendations:

**Recommendation 2.0:** The Health Information Technology Standards Panel (HITSP) should identify and endorse vocabulary, messaging, and implementation standards for reporting the most commonly used laboratory test results by September 2006 so as to be included in the Certification Commission for Health Information Technology (CCHIT) interoperability criteria for March 2007 certification. The HITSP must consider CLIA and HIPAA regulatory requirements as appropriate.

**Recommendation 2.1:** Federal delivery systems should develop a plan to adopt the HITSP-endorsed standards for laboratory data interoperability by December 2006.

**Recommendation 2.2:** Federal agencies and departments with health lines of business should include the use of HITSP-approved standards in their contracting vehicles where applicable.

### Discussion

Dr. Worzala asked if Recommendations 2.1 and 2.2 were targeting the same Federal delivery systems. Dr. Bell explained that Recommendation 2.1 is for Federal delivery systems that provide direct care (e.g., the Indian Health Service, the U.S. Department of Veterans Affairs [VA]) while Recommendation 2.2 is for Federal agencies and departments that use contracting vehicles (e.g., Medicare, Medicaid). To clarify what was meant, Dr. Clancy recommended adding “(providing direct patient care)” after the words “Federal delivery systems” in Recommendation 2.1.

**DECISION:** In Recommendation 2.1, change the text to read, “Federal health care delivery systems (those which provide direct patient care)....”

Dr. Worzala raised a question about whether Medicare and Medicaid would require or incentivize, for example, small physician offices that produce lab results to use HITSP-approved under this recommendation. Dr. Perlin assured her that what was being talked about here was not bedside tests, but the laboratories that go back and forth with another organization, such as a laboratory services provider.

Mr. DuBois asked for a change to make it clear that positive incentives would be used (the carrot) rather than mandates (the stick) to encourage the adoption of HITSP-endorsed standards.

**DECISION:** In the paragraph of text right before Recommendations 2.0, 2.1, and 2.2, insert language to indicate that the use of HITSP standards within the private sector will be encouraged via incentives rather than a Federal mandate.

**DECISION:** In Recommendation 2.2, change the text to read, "...with health lines of business should include/incentivize...."

### 3. Recommendations on CLIA/HIPAA Options

The EHR Workgroup considered the following draft recommendations:

**Recommendation 3.0:** ONC should review the possible models for the exchange of historical lab information and determine which would require CLIA/HIPAA guidance, regulatory change, or statute change.

**Recommendation 3.1:** ONC should engage the National Governors Association and other State-based organizations to resolve variations in "authorized persons" under various State clinical laboratory laws, as a resource for clinical laboratories seeking to define access rights to electronic laboratory data.

#### Discussion

Mr. Houston said Recommendation 3.0 seemed too vague; he noted that Recommendation 3.1 talked about the model of patient authorization to enable the exchange of information. Dr. Bell explained that the first step is for ONC to look at all the models for the exchange of historical models that exist and then to bump them against HIPAA and CLIA to see what is needed (e.g., guidance, regulations, statutory change). The intent of Recommendation 3.0 is to have ONC's legal support to tell it what the best approach is. Dr. Perlin suggested adding a deadline for this recommendation, and Dr. Bell suggested September 30, 2006.

**DECISION:** In Recommendation 3.0, set September 30, 2006, as the deadline for completion of the ONC review.

Ms. Pure, as she had in the previous meeting, recommended taking out the words "clinical lab" before laws in Recommendation 3.1, because these words are too restrictive. Dr. Clancy pointed out that it is not so much State statutes that need to be considered as it is commonly accepted practices (e.g., accepting CLIA to mean that information goes to ordering physician). Dr. Perlin recommended changing the language to say, "...resolve inconsistencies in statutes, regulations, policies, and practices." He also suggested adding a deadline of December 31, 2006. Finally, Dr. Clancy suggested that language be added to Recommendation 3.1 to indicate that the intent for ONC to implement Recommendation 3.0, and only after getting the recommendations, to engage the National Governors Association.

**DECISION:** In Recommendation 3.1, add the introductory clause: "Based on the findings from Recommendation 3.0, by December 31, 2006, ONC should..." Also change "under various state clinical laboratory laws" to read "under various state statutes, regulations, policies, and practices, as a resource."

Mr. Houston said he thought the EHR Workgroup was making a mistake by failing to recommend the development of a patient authorization scheme that would enable patients to preauthorize the release of personal health information without changes in State laws. Dr. Bell and Mr. DuBois explained that they had tried to go the patient authorization route, but a discussion with CLIA expert Lynn Egan led them to

conclude that the patient authorization route would not work. She said that the assumption that if CLIA is silent, one can do what one wishes, is incorrect. CLIA says that in the event that the State takes any action, be it more stringent or less, State law applies; absent it, CLIA applies. Furthermore, if CLIA is silent, one cannot assume patient authorization is appropriate; one has to go back and get CLIA guidance. Mr. Houston said he thought there was an enormous misunderstanding here –he believes the cornerstone is that the patient has the right to release lab information to whomever he or she wants. Dr. Bell said that that would be only if there was a specific State regulation or statute that allowed that, but at this point, that does not exist. Dr. Bell indicated that patient authorization of the release of lab data could be added as one of the models that are examined in Recommendation 3.0.

Mr. Houston said he thought there should be more discussion. He agreed to Dr. Perlin’s recommendation about putting something in the paragraph before the recommendations, but he wanted to make it very clear that this should be one of the focus areas.

**DECISION:** In the explanatory text before the third set of recommendations, insert text along the lines of the following: “Exploration and guidance on the patient’s role and rights regarding their authorization of the release of such data is needed.”

#### **4. Recommendation on Privacy and Security**

The EHR Workgroup considered the following draft recommendation:

**Recommendation 4.0:** A consumer empowerment subgroup, comprised of privacy and security members, and members of all AHIC Breakthrough workgroups should develop a consistent set of recommendations on patient identification, authentication, and authorization.

#### **Discussion**

Dr. Perlin noted that EHR Workgroup members Mr. Houston and Mr. Isenstein had agreed to participate on the consumer empowerment subgroup that would be developing the consistent set of recommendations on patient identification, authentication, and access to personal health information, etc. Dr. Bell reported that on May 1, 2006, the Consumer Empowerment Workgroup had agreed to add five elements to specify this a bit more.

**DECISION:** Change Recommendation 4.0 to read as follows:

**Recommendation 4.0:** A FACA compliant, consumer empowerment subgroup comprised of privacy and security experts from all Community Breakthrough Workgroups should report a set of recommendations to the Community by September 30, 2006. The recommendations should be targeted to apply to each Workgroup’s specific charge and should outline:

1. Methods of patient identification
2. Methods for authentication
3. Methods for controlling access to personal health information
4. Policies for breaches of personal health information confidentiality
5. Guidelines for secondary uses of data
6. A scope of work for a long-term, independent advisory body on privacy and security policies.

#### **5. Recommendations on Advancing Adoption**

The EHR Workgroup considered the following draft recommendation:

**Recommendation 5.0:** ONC should assess and develop the business case for historical laboratory result data sharing across all adoption models, considering the unique needs and alignment of incentives for all stakeholders.

### Discussion

Dr. Bell asked whether the EHR Workgroup would be willing to change the actor in this recommendation from just ONC to the broader “HHS, working with the private sector.” Dr. Perlin suggested broadening the language to “HHS, in collaboration with all key stakeholders” in order to include agencies other than HHS. Mr. DuBois recommended adding the word “current” to indicate that business case should be assessed not just for historical laboratory result data sharing but also for “current” laboratory result data sharing.

Dr. Clancy raised the question, “Is it the ‘business case’ or the ‘value proposition’ that needs to be developed?” She said she believes it is the value proposition. Dr. Worzala countered that the business case needs to be made as well, because the value goes to those other than those who need to make the investments. Mr. DuBois agreed. Dr. Clancy said that in the world of quality, they struggle, because there is no business case for improving diabetes care; the real question ought to be, “How do we create a business case?” Dr. Worzala agreed. Dr. Perlin suggested that the recommendation include the needs both to assess the value proposition and to develop the business case.

**DECISION:** Change Recommendation 5.0 to read as follows:

*Recommendation 5.0:* HHS, in collaboration with all key stakeholders, should assess the value proposition and develop the business case for current and historical laboratory result data sharing across all adoption models, considering the unique needs and alignment of incentives for all stakeholders.

## 6. Recommendations on Assessment, Monitoring, and Research

The EHR Workgroup considered the following draft recommendation:

**Recommendation 6.0:** AHRQ should develop a proposed study methodology to measure the extent and effectiveness of the adoption of the first stage of HITSP standards, as well as the adoption and utilization of aggregated patient-centric data as it becomes available.

**Recommendation 6.1:** AHRQ should research best practices in the implementation and utilization of patient-centric laboratory data stores and how to disseminate this knowledge.

### Discussion and Decisions

Dr. Clancy recommended changing the actor from just AHRQ to “AHRQ, in collaboration with the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare & Medicaid Services (CMS)” and setting a deadline of March 31, 2007, for completion of the study methodology. Ms. Gelinask asked, “If this study addresses first stage of HITSP standards, is it intuitive that it would go beyond this?” Dr. Clancy said that that is one of the key questions she would ask a study to investigate.

**DECISION:** Change Recommendation 6.0 to read as follows:

*Recommendation 6.0:* By March 31, 2007, AHRQ, in collaboration with the CDC and CMS, should develop a proposed study methodology to measure the extent and

effectiveness of the adoption of the first stage of HITSP standards, as well as the adoption and utilization of aggregated patient-centric data as it becomes available.

Ms. Gelinas said there are some RHIOs where best practices in implementing and utilizing patient-centric lab data are in place. To make the recommendation stronger, she recommends changing the word “disseminate” to “implement.”

**DECISION:** Change recommendation 6.1 to read as follows:

*Recommendation 6.1:* By December 31, 2007, AHRQ, in collaboration with the CDC and CMS, should research best practices in the implementation and utilization of patient-centric laboratory data stores and how to implement this knowledge.

#### ***D. Wrap-up of Discussion of Recommendations***

Co-chairs Ms. Gelinas and Dr. Perlin said that unless someone on the EHR Workgroup objected, they would present the recommendations as modified to HHS Secretary Leavitt and the AHIC on May 16. Dr. Perlin added that the EHR Workgroup would come back to address some issues related to CLIA and patient authorization. Dr. Bell said that the ONC staff would brief HHS Secretary Leavitt on the recommendations the next morning.

Ms. Pure expressed concern that the EHR Workgroup’s 10 recommendations, even if accepted, might not have much real impact on the country in a year. Dr. Bell reported that Secretary Leavitt had just announced that one of his nine top priorities in the 1,000 days is the breakthroughs from the Community, and he will probably be talking about that at the May 16 meeting. He recognizes that for anything to happen in a short time period, major gears need to shift. Once we move the bigger gears – the six issue areas identified on the first page of the EHR Workgroup’s letter to Secretary Leavitt – the smaller gears will fall into place.

Ms. Gelinas said that in the private sector, they are concerned about next hurricane season and bird flu, so they want actionable recommendations. It is important to communicate this to the Secretary. Dr. Perlin agreed with Ms. Gelinas but added that he is optimistic, in part because he has been at the VA and knows what is achievable. He believes that bringing together public and private organizations, regulatory and operational parties, vendor and providers for a dialogue about what needs to happen to make the gears turn has laid tremendously powerful groundwork.

### **6. Presentations Related to First-responder EHRs**

Dr. Perlin indicated that EHR Workgroup members would hear four presentations by experts on first responders regarding (a) what discrete elements from EHRs are needed by first responders in disasters or emergency situations and (b) in what form these elements might be made available.

#### ***A. Dr. Edward Barthell, American College of Emergency Physicians***

Dr. Barthell emphasized that it is important that data systems for emergency medical services (EMS) to be flexible, because the data needs and mechanisms of first responders will vary by (a) type of first responder – fire departments, police departments, EMS, and hospital emergency departments – and (b) the nature of the scenario they are being asked to cope with, whether routine emergency care or a disaster (e.g., kinetic energy trauma, such as a plane crash; toxic or radiological exposure, such as sarin in the Tokyo subway; an emerging infectious disease or pandemic, such as cryptosporidium or influenza). The following charts presented by Dr. Barthell sum up the main points of his presentation.

**Data Needs of First Responders (from Dr. Barthell)**

Type of first responder	Routine emergency care	Disaster
Prehospital EMS	Demographics Meals – allergies Problem list Advance directives Patient destination (Where should I take the patient, for example, based on patient preference?)	Patient ID# Red-yellow-green (triage) Patient destination (Where can I take the patient?)
Hospital emergency departments	Demographics – PMD Meals – allergies Advance directives Previous EKG What is coming? Available inpatient space?	Demographics – ID# Meals – allergies What is coming? Available destinations?

**Mechanisms for Making Data Available to First Responders (from Dr. Barthell)**

Type of first responder	Mechanism for making data available
Prehospital EMS	Radio notification from dispatch (the primary way that emergency medical technicians [EMTs] in the field have any kind of communication or get any kind of information) Pagers or cell phones (commonly available among EMTs) Paper-based charting predominates Patient tracking systems evolving, est. <15% Electronic charting systems evolving, est. <15% Wireless network access evolving
Hospital emergency departments	Registration/ADT systems, est. >95% Internet access now available, est. >95% Web-based capacity/diversion systems common, est. >50% Electronic tracking systems becoming common, est. >30% Electronic physician charting still evolving, est. <15%

***B. LTC David Parramore, Department of Defense (DoD)***

Lieutenant Colonel Parramore reported that last year, during Operation Iraqi Freedom, DoD delivered electronic health systems in the deployed environment. He said that he really had nothing additional to add to the requirements put forth by Dr. Barthell. DoD’s requirements are essentially the same.

***C. Dr. Roxane Townsend, Louisiana Department of Health and Hospitals***

Dr. Townsend said she fully agreed with Dr. Barthell’s summary of the essential data elements needed by first responders, she but noted that the more difficult question is, “How do you create a portable EHR to for use during an emergency response, especially when, at the time of a crisis such as Hurricane Katrina, the normal methods of communication are not available?” (At the Louisiana Superdome after Hurricane Katrina, for example, they had some emergency power, but the cell towers were knocked down. The only thing that worked – and occasionally, not reliably – was a satellite phone or an 800-MHz radio.)

Dr. Townsend reported that Louisiana has been developing a health information exchange with funding through a contract with ONC. Although the system will not be fully robust by the time hurricane season

starts in less than a month, they are locating electronic information that is already available (e.g., claims data, as proven in KatrinaHealth.org; data from some major hospitals) and using that to recreate and reconstruct some of the medical information for a lot of the evacuees.

Many providers in Louisiana are ensuring they have backup systems for their data as well. The VA system's backup is not local, so they had their information even though their hospital went down. The Arcadian Ambulance Service has computers on all of their ambulances statewide; from their command and control center, therefore, they actually can feed out information to the ambulance at the point that someone is being picked up. It helps them with GPS technology and any information that a caller can give to them or that they can share with the hospital on the way. Finally, Dr. Townsend reported that the Louisiana Emergency Response Network, which addresses first responders' needs to know where to take a patient, is getting more attention in the wake of Hurricane Katrina.

#### ***D. Aarron Reinert, Executive Director, Lakes Region EMS (Minnesota)***

Mr. Reinert said the role of EMS is changing in part because of concerns about effectively responding to manmade or natural disasters. There are two models of EMS operations in disasters. In the "FedEx model," EMS prioritizes patients (triage) and delivers them to a hospital. But probably a better model has EMS managing patients in the field and then taking only a small set of patients to the hospital.

*EMS Agenda for the Future: Implementation Guide* – a consensus document published by the National Highway Traffic Safety Administration in 1996 – frames what data elements are needed for EMS to play a larger role than it has in the past, as both an extension of emergency medicine and an arm of public health. A dataset encompassing some 500 data elements – the National EMS Information System (NEMSIS) – includes demographic data, medications, patient's history, allergies, laboratory values, etc., but also many other variables. Now that the NEMSIS dataset exists, Mr. Reinert said, the greatest need is for connectivity to allow EMS to exchange the information in the dataset.

#### ***E. Discussion of First-Responder EHR Presentations***

Noting that there seemed to be a fair amount of consensus among the speakers on what data elements were most important for first responders, Dr. Bell asked the four presenters to make suggestions to the EHR Workgroup on what it might do to make communication occur (e.g., where data reside; how the data can be extracted and made available).

Mr. Reinert explained that the structure of NEMSIS allows the 500 data elements to move within a region of the State, within a State, or within multiple States. But first there is a need to figure out how to get the disparate platforms to communicate so that EMS providers can talk with the hospital, public health authorities, or any number of responders. The other thing that is needed is connectivity, because even if the platforms can communicate, that will do no good without connectivity. Mr. Reinert said a Web data repository might not be the best solution; it is important that the data be able to move throughout the system, whether at a particular disaster scene, a particular region, the dome in Louisiana, or the hospital in Texas. He noted that if he had had Internet access in Texas, he would have had full access to all of his patients' medical records in the information system back in Minnesota.

LTCParramore stated that it is extremely important for hospitals to have Internet access. In a combat zone such as Iraq, DoD finds that delivering the Internet to the point of injury or to EMS first responders is extremely difficult; they generally rely on voice networks during the evacuation of a patient from the point of injury to the hospital. At least for DoD, the documentation begins electronically in earnest at the hospital, and the EHR systems that they tap into on the Internet are available worldwide.

Dr. Barthell agreed that if we could get Internet access to the hospitals and have at least voice communication out into the field, that would be a good way to start. He added that if you look at the types of data that are in this big NEMESIS dataset, there are two things one is reviewing: (a) past history data on patients, and (b) data elements that have to do with documenting a specific encounter. You certainly can document that encounter, but when it gets to the hospital, it is very important to have connectivity.

Dr. Perlin reported that the VA had satellite systems developed with broadband capacity that allowed not only the transmission of medical data but communication. A member of the audience, CDR Laura Tillery (RET), noted that on the basis of her experience with DoD and with medical triaging in Africa and Antarctica, she would recommend putting into place a contract using commercial satellites during a national disaster for connectivity. She said that DoD also realized the need to be able to store and forward information for situational awareness and for electronic recording of the information.

CDR Tillery (RET) also said that experiences in Iraq and Kosovo underscored the need for developing an approach to standardizing patient identification – especially when a patient is not conscious or coherent – so that once the patient’s real identity is determined, someone can go back and put in the correct information. Dr. Perlin agreed that a standardized approach to a unique patient identifier such as this would be very useful.

Ms. Gelinis, noting that the private sector has no system of connectivity like that of DoD or the VA, pointed out that during Katrina, the best Internet access would not have helped in terms of accessing patient’s medical records, because the physician practices and hospitals that maintained those records were under water and closed. She suggested that perhaps the EHR Workgroup could appeal to average Americans to develop some type of very basic medical record with just a few key elements (e.g., allergies, medications, major medical conditions) immediately, so that there will be something if the records are gone as they were in Katrina.

Dr. Perlin concurred with Ms. Gelinis, adding that a “personal preparedness document” might be sort of a nascent personal health record (PHR) such as that being discussed by the Consumer Empowerment Workgroup. A secure, offsite repository could be developed for storing basic personal health information (e.g., demography, allergies, medications, major past history) that would be available broadly with modest connectivity. Dr. Perlin noted that the VA’s “My HealtheVet” Web site, for example, can be populated with a patient’s entire medical record or less. Ms. Gelinis stated that she liked idea of empowering Americans to self-populate information.

Colonel Bart Harmon reported that DoD has learned the importance of ensuring system reliability, system availability, and system survivability. DoD’s data repository that supports EHRs has a backup site in another State, so even if the even the primary data center were to be hit by a nuclear weapon, the backup site would continue operating. When their hospitals were shut down in the hurricane zone, they evacuated patients to Fort Smith Naval hospital and continued their chemotherapy from the central data repository. Drawing from DoD’s experience, Colonel Harmon recommended that one requirement in system certification for PHRs be that the system can survive a disaster.

In preparation for the upcoming hurricane season, which is only about a month away, Mr. Houston suggested that the best thing might be to encourage people to put their “personal preparedness documents” on paper; the paper documents then could be entered electronically into a system for first responders in the future. Dr. Perlin agreed that developing a personal preparedness dataset on paper now, with the idea that the data will be converted into an electronic form in the future, was an excellent idea, especially given that the hurricane season is nearly upon us.

Dr. Jim Sorace, turning back to the electronic data system for first responders, asked, “How will the data system be organized so that first responders can retrieve information on a patient? Will there be some sort of national repository for these things, or is there some way that the data could be made available to an agency running a disaster for a certain geographical area as needed?” Dr. Barthell said that all these are questions that EMS providers tried address in NEMESIS. To distribute the data, they talked about having a State-based system where each State or region within a State would keep the essential medical dataset and it would be accessed over the Internet. One approach was using smart cards that could be read by devices put in ambulances.

Dr. Perlin concluded the discussion, saying that there had been an excellent discussion of the key data elements that are necessarily for first responders; the possibility of getting those key elements on paper as a first step toward an electronic system for first responders; and good solutions for consolidating personal health information, be it a PHR, a smart card, or another technology. He noted that Dr. Bell had a list of some of the data that exist electronically right now (e.g., that included in KatrinaHealth.org) and asked her to suggest next steps.

Dr. Bell said, first, the EHR Workgroup seemed to have reached a consensus on some critical elements of data that should be available to first responders in disasters or emergency situations, so the EHR Workgroup could go to the Community on May 15<sup>th</sup> and say that those elements have been identified. Second, the EHR Workgroup could report that further work would be done over the course of its next meeting on recommendations for what format to use for this information. Third, the EHR Workgroup could report that it would explore ways in which existing electronic information could be made available at the point of contact, drawing in part on work done in conjunction with work done by the Workgroup on its specific charge.

**DECISION:** ONC will work with EHR Workgroup members over the course of the next week or so and come up with some broad approaches related to that it could bring to the HHS Secretary and the Community at May 16<sup>th</sup> meeting. The EHR Workgroup will make a report along the following lines:

“The EHR Workgroup has identified some critical elements of information needed by first responders as demographic information, medications, allergies, and major health problems.

“The EHR Workgroup will explore at its next meeting recommendations for what format to use for communicating information to first responders.

“The EHR Workgroup will explore ways in which existing electronic information could be made available to first responders at the point of contact (e.g., a PHR, a smart card).”

Dr. Perlin suggested that the ONC staff and volunteers from the EHR Workgroup mock up a basic, paper-based “personal preparedness PHR,” with the idea that this might be converted into an electronic format in the near future.

**ACTION:** Dr. Perlin and Ms. Gelinas, as EHR Workgroup members, will volunteer to prepare a mockup of a paper-based “personal preparedness PHR” for presentation at the Workgroup’s next meeting. This might be offered as a first step toward the longer-term goal of developing a system that will ensure that critical health information that first responders need when attending to people in a disaster or emergency situation can be made available electronically.

Mr. DuBois noted that America's Health Insurance Plans (AHIP) has been developing a universal PHR that an individual can use to provide information when changing health insurers, and he encouraged the ONC staff and Workgroup members to talk with AHIP about this. He also suggested the possibility of having HHS offer a PHR for people who offer to enroll and input their own prescription and immunization information, thereby authorizing its inclusion and use.

Dr. Perlin noted that ways to achieve indexed PHRs available under disaster circumstances, certainly available to individuals, and ways to interface with the Consumer Empowerment Workgroup would be topics addressed at the next EHR Workgroup meeting. He asked ONC to report back to the EHR Workgroup on what sort of electronic health information might be available for first responders to use in disasters, particularly tapping into HHS resources around KatrinaHealth.org, and learning from that. Dr. Bell agreed.

**ACTION:** ONC staff will report back to the EHR Workgroup at the next meeting what sort of electronic health information might be available for first responders to use in disasters, particularly tapping in to HHS resources around KatrinaHealth.org.

## 7. Public Comments

There were no public comments. The following e-mail address was left up for half an hour to enable members of the public to send in any comments they might have: [ehlthrecrods-wkg@hsrnet.com](mailto:ehlthrecrods-wkg@hsrnet.com).

## 8. Concluding Remarks

Ms. Gelinas and Dr. Perlin concluded the meeting, thanking EHR Workgroup members, presenters, and ONC staff for all their efforts. They noted that the next meeting of the Community is on Tuesday, May 16, 2006.

**Workgroup on Electronic Health Records Members  
and Designees Participating in the Web Conference**

Jonathan B. Perlin Co-chair	VA
Lillee Smith Gelinas Co-chair	VHA, Inc.
Karen Bell Staff Co-chair	ONC/HHS
Dr. Carolyn Clancy	AHRQ
Jason DuBois (for Alan Mertz)	American Clinical Laboratory Association
LTC Bart Harmon, M.D.	DoD
John Houston	National Committee on Vital and Health Statistics
Howard Isenstein (for Chip Kahn)	American Federation of Hospitals
Connie Laubenthal (for John Tooker)	American College of Physicians
Dr. Blackford Middleton	Health Information and Management Systems Society
Daniel Morreale (for George Lynn)	American Hospital Association
Pam Pure	McKesson Provider Technologies
Dr. Jim Sorace (for Barry Straube)	Centers for Medicare and Medicaid Services
Chantal Worzala (for George Lynn)	American Hospital Association
<b>Presenters</b>	
Dr. Edward Barthell	American College of Emergency Physicians
LTC David Parramore	DoD
Aarron Reinert	Lakes Region EMS
Dr. Roxane Townsend	Louisiana Department of Health & Hospitals,
<b>Others</b>	
Dr. David Brailer	ONC/HHS

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