

Statement By The

**Institute of Electrical And Electronics Engineers –
United States of America (IEEE-USA)**

Concerning

Health Information Technology

To The

**Senate Commerce, Science & Transportation
Subcommittee on Technology Innovation & Competitiveness**

30 June 2005

IEEE-USA and its Medical Technology Policy Committee commends the Subcommittee on Technology, Innovation, and Competitiveness for examining how information technology can be applied in the medical industry to reduce medical errors, lower healthcare costs and improve the quality of patient care. We are pleased to offer the following statement for the June 30 hearing record.

IEEE-USA supports the advancement of eHealth and its potential of providing improved information flows. We believe that promoting the common use of information technologies across the nation to reduce medical errors and delineate quality metrics of health information, combined with interoperability and standards adoption, can lower costs and improve outcomes. In addition, national health threats--such as biological, chemical and nuclear terrorist attacks--require uses of these technologies for purposes of detection planning, preparedness and response.

eHealth needs to be approached recognizing the needs of patients and implemented with consumer approaches that have been successful in other economic sectors. These approaches range from language usability to rating systems that will aid purchasers in the determination of quality. We support implementation of technology to promote patient health, but understand that without clear guidelines, standards and the removal of barriers such as syntactic and semantic interoperability and privacy, security and confidentiality concerns, the goal will remain elusive.

Major goals for improving the health care system in the U.S. are improving patient safety including reducing errors; improving the interoperability of health information systems; and improving the capability for exchanging patient information while increasing the effectiveness and containing costs. Federal reimbursement policies need to reflect the contributions of information technologies for improving the quality of the healthcare system.

The balance of this statement offers our recommendations on three related subjects: how to build the National Health Information Network with an appropriate emphasis on security and privacy, the use of voluntary health care identifiers, and appropriate roles for government in promoting the development of home health-care technologies.

BUILDING THE NATIONAL HEALTH INFORMATION NETWORK

IEEE-USA advocates transitioning from our current state of disconnected health information systems to a National Health Information Network (NHIN) that would make use of leading-edge networking technologies, such as web services, mobile communications, and multimedia communications to provide secure and reliable transport of healthcare information. To that end, IEEE-USA makes the following recommendations to the Department of Health and Human Services, the Office of the National Coordinator for Health Information Technology, legislators, administrators and healthcare regulators:

1. Transition to the desired National Health Information Network should be accomplished by building upon existing systems by increasing the reliability, availability and security of these networks. To the extent feasible, the NHIN should support appropriate authorization for access to the distributed nature of health information where it currently resides. It should not rely upon developing and maintaining new, government-controlled, centralized databases or personal health information repositories.
2. Economic policies covering provider expense for transition to the National Health Information Network and adopting an Electronic Health Record should be favorably designed to facilitate provider conversion.
3. Development of the National Health Information Network should not compromise the security and privacy of personally identifiable health information, as currently defined in the HIPAA Privacy and Security Final Rules.
4. Use of the National Health Information Network should adhere to the guidelines on use of genetic information cited in IEEE-USA's position statement on "Non-discrimination in Employment Based on Genetic and Other Health Information," August 2002.
5. The National Health Information Network should implement the capability to provide public warnings about bioterrorism, epidemic disease, safety and efficacy of vaccines, etc.
6. The National Health Information Network should encourage patient access to medical records and establish "cradle to grave" longitudinal medical records.

7. The standard of such “cradle to grave” records should not be restricted to data pertinent to acute care settings, and should include key data fields from long-term care’s Minimum Data Set to make such records useful throughout the different care settings, including long-term care.
8. The National Health Information Network should develop and implement metrics to document the costs, benefits and unintended favorable and adverse impacts of sharing healthcare information and electronic health records.
9. The NHIN should support federal and state government public health surveillance activities - relative to reportable diseases, health conditions, injuries and risk factors. It should enable these respective public health authorities to secure necessary statistical data by providing a direct means by which they could trace the reports back to individual health providers, and an indirect means by which individual patients could be contacted, if needed, for epidemiologic investigation.
10. The National Health Information Network should be supportive of quality control efforts at institutional, state and national levels by having a means by which quality control staff at all three levels can obtain appropriate authorization to access current statistical data for comparison with like facilities, baselines and benchmarks.
11. The NHIN should have a provision so that appropriately authorized persons in academic and governmental settings can access detailed statistical data for research purposes.
12. The NHIN should support individually specifiable privacy preferences for all healthcare consumers. It should include provisions so that patients could indicate their willingness or unwillingness to be solicited as subjects of medical research by authorized investigators from academic and governmental agencies.

Development of a National Health Information Network would require a joint effort by federal, state and local governments and the private sector. Working jointly would increase interoperability, reduce risk, and ensure that a competitive market existed for products intended for producing healthcare services in a networked environment. However, creating a NHIN also creates new requirements for reliability, availability and maintaining healthcare information privacy and security.

For additional information, see IEEE-USA’s position statement on the National Health Information Network, with emphasis on Security and Privacy Issues at:
<http://www.ieeeusa.org/policy/positions/NHIN.asp>

USE OF VOLUNTARY HEALTH CARE IDENTIFIERS

IEEE-USA believes that the use of voluntary healthcare identifiers can significantly enhance healthcare efficiency and patient safety. Consistent with the framework of the HIPAA legislation, IEEE-USA recommends that legislators and regulators develop and implement policies to create a Voluntary Healthcare Identifier Program and establish demonstration projects to document these benefits.

Policies needed to facilitate adoption include:

- Congressional authority and resources for the Department of Health and Human Services and the National Committee on Health and Vital Statistics to develop and maintain a Voluntary Healthcare Identifier System
- Strong penalties, including monetary, civil and criminal for privacy and security abuses
- Safeguards against current or future unintended use of the information, and
- Incentives for healthcare stakeholders to encourage adoption of Voluntary Healthcare Identifiers

For additional information, see IEEE-USA's position statement on the Voluntary Healthcare Identifier at:

<http://www.ieeeusa.org/policy/positions/healthcareidentifier.html>

PROMOTING DEVELOPMENT OF HOME HEALTH-CARE TECHNOLOGIES

IEEE-USA urges Congress and policy-makers, in both the public and the private sector, to take the actions needed to expand uses for electronic devices, assistive and monitoring software, and home health communication technologies to provide home health care to those in need. Further, we support developing guidelines for reimbursement of these technologies -- both for developers and users.

IEEE-USA believes that using electronic technologies to assist and monitor elderly, disabled, and chronically ill individuals in the home can improve quality of life, improve health outcomes, and help control health care costs.

Accordingly, IEEE-USA supports:

- Public and private sector research on the effectiveness, cost-efficiency, and potential return on investment for each class of home care technology; and research on how such technological innovations can best be integrated into a comprehensive package for home health care.
- Tax incentives to stimulate research, development and deployment of home care technologies.
- U.S. Department of Health and Human Services' Centers for Medicare and Medicaid Services action to streamline and expedite exemption, clearance and approval processes for home care technologies. Reimbursement should not be limited to U.S. Food and Drug Administration approved devices.
- Medicare and other health insurance carrier action to provide reimbursement for home care technologies that meet specified qualifications (see background).

For additional information, see IEEE-USA's position statement on home healthcare technologies at: <http://www.ieeeusa.org/policy/positions/healthtechnologies.asp>

CONCLUSION

IEEE-USA strongly believes that implementation of information technologies into the national healthcare infrastructure will advance clinical care, drive economic efficiencies, facilitate the linkage of fragmented systems and provide consumers access to information by which they can better understand and address their own healthcare needs.

Policy barriers, implementation impediments and funding limitations have slowed or limited adoption by healthcare stakeholders of complex information databases, electronic medical records and advanced communication technologies. At times the barriers have seemed impenetrable, but with the current attention of Congress, the White House, the Department of Health and Human Services, regulators and private industry, we are hopeful progress can be made.

IEEE-USA is an organizational unit of the IEEE. It was created in 1973 to advance the public good and promote the careers and public policy interests of the more than 220,000 technology professionals who are U.S. members of the IEEE. The IEEE is the world's largest technical professional society. For more information, go to <http://www.ieeeusa.org>. If we can be of further assistance, please contact Deborah Rudolph in our Washington office at (202) 785-0017 x 8332 or email at d.rudolph@ieee.org.