

Statement of GE Healthcare

To the NHIN Workgroup of the HIT Policy Committee December 16, 2009

GE Healthcare is a leading supplier of healthcare IT, offering a wide range of solutions to support medical practices, hospitals, integrated delivery networks, public health organizations, and payor groups. We have deep expertise in development and deployment of standards-based health information exchange (HIE).

GE has been a strong supporter of the HITECH Act and the work of the HIT Policy Committee. We have also been strong supporters of the NHIN and believe that it can provide the basis for nationwide health data exchange, meeting the vision recently set out by Dr. Blumenthal in his excellent communication on HIE.

Implemented in coordination with other elements of HITECH, and according to HITSP standards, the NHIN can produce a great leap forward in health care quality and efficiency and truly be a *"Health Internet"*. As detailed below, we believe that initial implementation of the NHIN should support 2011 meaningful use HIE criteria while remaining primarily focused on achieving the robust HIE needed by our healthcare system and required to support 2013 meaningful use.

Key Points

As this workgroup begins its work, with an initial focus on the interrelationship of the NHIN and meaningful use, we wish to set out a few central points.

- 1. To achieve Dr. Blumenthal's visions, it is critical to maintain fundamental premises of the NHIN.**
 - Use of robust standards and Internet technology to connect a variety of organizations and networks
 - Strict neutrality among the "edge systems" connecting to the NHIN (e.g., EHRs, PHRs, labs, pharmacies, imaging centers, IDNs, public health, quality management organizations, federal and state government agencies), not favoring particular proprietary solutions
 - Not requiring development and maintenance of large centralized patient information databases, with attendant cost and privacy concerns
 - Accommodating decentralized data repositories and active data sharing via "pull" and "push" technologies, while enabling secure access across the network via well-accepted security standards and data use agreements
- 2. Substantial progress has been made on the NHIN, demonstrating its ability to meet the needs of a wide variety of users, including large federal agencies, IDNs, individual hospitals, and physicians.**

You will hear from Mr. Borland of the Social Security Administration (SSA) today about the major value that the NHIN has provided to SSA. A recent *Technology Review*¹ article on HIE at Boston Medical Center, an early NHIN participant, details how the technologies underlying the NHIN allow sharing and access to patient data to save lives, increase quality, and reduce costs.

3. Viewing the NHIN as a network of networks is consistent with ONC's vision.

This approach provides HIE where health care is provided and consumed (e.g., IDN, community, PHRs and state), while data flow among these levels and nationally. It also promotes innovation among many connected edge systems.

Health Information Organizations (HIOs) are a critical element of the NHIN. A distributed data model and standard interfaces with edge systems and the NHIN can drive down HIO costs, making them far more economically viable. Moreover, the standards and technologies used by the NHIN are fully consistent with a patient centric approach to data, including connection to personal health records

The NHIN Connect software tools are an important, standards-based means to enable to such connections. In this regard, we emphasize the role of HITSP and ultimately ONC to drive standardization of the connections between HIOs and EHRs as it is doing between HIOs and the NHIN. Such standardized interfaces, consistent with current EHR standards and certification criteria, will substantially lower the costs of HIOs and their use for all concerned.

4. In thinking about the interrelationship of meaningful use and the NHIN, we urge maintenance of a clear focus on 2013 (and beyond), when more robust use of standards-based HIE for meaningful use has been envisioned.

The focus for 2011, consistent with the expected meaningful use criteria, should be to ensure that providers have EHRs capable of supporting standards-based HIE and can engage in the relatively modest forms of HIE we anticipate will be required for 2011. This approach will set the stage for stronger and more valuable HIE from 2013 on. ONC's state HIE funding and Beacon Communities projects will play a major role in enabling providers to access cost-effective HIE capabilities.

We urge you to avoid the temptation to seek wide use of very limited HIE approaches via the NHIN for 2011 meaningful use, diverting us from the path toward Dr. Blumenthal's vision. Paradoxically, it would be better to have less data exchange in 2011 to ensure that, by 2013, we are on the right trajectory for robust, standards-based HIE. The alternative could lock us into a shallower, less valuable trajectory.

¹ *Technology Review*, Prescription: Networking: A new urban network suggests how technology could remake health care; HDavid TalbotH; November/December 2009. www.technologyreview.com/computing/23545/

5. **We urge that you not refocus the NHIN on a primarily point-to-point approach to HIE by using seemingly simpler approaches to secure Internet transport.**

Such a shift in direction will send the wrong signals to those considering investing in standards-based HIE, generate little real value, create needless risks and costs, and divert from the robust HIE infrastructure need to support the goals of HITECH.

A primary or sole focus on point-to-point data exchange, while superficially attractive, has several substantial defects:

- Once started, extensive point-to-point, with a means to share not explicitly planned, is hard to extend to sharing models, as shown over the last decade in several nations with centralized systems (e.g., Denmark and New-Zealand)
- Point-to-point workflows do not conform to how healthcare is delivered or consumed, limiting patient choice and the value derived from exchange
- It requires maintenance of complex directories of potential recipients
- It requires those who would share data to either send out data immediately or meet a disruptive pattern of demands that would require substantial back-end security infrastructure while requiring those who would access patient data to know all of the places where such data resides
- It has the same or greater privacy policy challenges as do sharing models, especially as point-to-point becomes complex and error prone when used on a large scale (note the many disclaimers in faxes and e-mails in case of misaddressing, which is not tolerable with sensitive patient information).
- Fundamentally, extensive use of point-to-point creates undesirable sharing patterns, forcing reliance on large central databases
- One major consequence of these issues will be to favor or even create dependencies on particular proprietary solutions and technologies without regard to underlying patient preference or value

6. **Notwithstanding these concerns, we agree that point-to-point exchange has its place along with a more scalable, federated registry-based data sharing infrastructure based on robust standards.**

Similarly, “RESTful” technologies for secure data transport, used by many web applications, have their place along with more robust SOAP web services, each using Internet standards. The point is to use the right architecture and transport technologies for the task. Through Connect and other toolkits, ONC and others have provided tools to allow end users to effectively use robust approaches.

HITSP and those working on the NHIN, including ONC, have done an excellent job in delineating which standards are best for which value cases. In our judgment and that of many leaders in healthcare technology, the approaches to HIE refined by HITSP, and in production across the nation, are the right ones to meet our national goals.

HITSP’s constructs use such highly secure transport mechanisms as XDR (point-

to-point) and XDS (data sharing via registries) when exchange among systems demands secure and layered approaches to Internet transport of the data needed to support sophisticated clinical tasks. These approaches also recognize the usefulness of point-to-point and registry data sharing, as well as cases where less secure web-based data transport mechanisms are appropriate.

We urge that you engage more closely and frequently with HITSP, IHE, and HIOs and providers making successful use of HITSP data content and data transport standards. It would have been very valuable to hear from some of these individuals at the hearing on the 16th and we hope you engage with them in the near future. These individuals are well positioned to explore the detailed technical underpinnings many of the in this statement, especially regarding the various approaches to secure data transport. Moreover, HITSP's process, with over 600 stakeholders from many perspectives engaged, is the right place to work out the complex technical issues associated with data transport and other HIE standards.

Conclusions

The work being done by ONC, the Policy and Standards Committees, the NHIN, and HITSP will transform our industry and healthcare system. This transformation must maintain a focus on patient care, patient safety, and patient involvement in care decisions. Central to such a patient centric healthcare system is the secure, unimpeded and timely flow of accurate and actionable patient health information consistent with patient preferences on data sharing.

We are convinced that an NHIN firmly grounded in HITSP standards, leveraging both the Internet and the expertise of the health care technology community, can meet this challenge and provide a firm basis for truly meaningful use of EHRs and healthcare IT.

We look forward to working with you, directly and through the Electronic Health Record Association, as we pursue our shared goals of a high value NHIN and widespread meaningful use.