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Before the
Information Exchange Workgroup's Provider Directory Task Force
Hearing on "Provider Directories"

September 30, 2010

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Good afternoon Chairs of the Information Exchange Workgroup of the HIT Policy Committee and the Provider Directory Task Force. Thank you for holding this hearing and allowing me the opportunity to provide the perspective of the Minnesota e-Health Initiative on the concept of "provider directories" and specifically perspective and implications for population and public health.

Minnesota e-Health Initiative

The Minnesota e-Health Initiative is a public-private collaborative whose vision is to accelerate the adoption and use of health information technology in order to improve health care quality, increase patient safety, reduce health care costs and improve public health. It is guided by a legislatively chartered, statewide advisory committee with 25 representatives from interested and affected stakeholders in health information technology (HIT). The Minnesota Legislature charged the Minnesota Department of Health with leading this initiative since its inception in 2004. The work of the Initiative has resulted in several achievements including the development of a statewide plan to provide the framework for the Minnesota health and health care community to meet Minnesota's 2007 mandate for the adoption and use of interoperable electronic health records by 2015. Additional details of the Initiative are available at: <http://www.health.state.mn.us/e-health/index.html>

Minnesota e-Health Advisory Committee

The success of the Minnesota e-Health initiative over the past six years is due in large part to the leadership and contributions of the Minnesota e-Health Advisory Committee members. The committees are co-chaired by Walt Cooney, Director of the Neighborhood Health Care Network and Marty Witrak, Professor and Dean, School of Nursing, College of St. Scholastica. *Members of the Committee are shown in Attachment A.* In addition several workgroups are convened and thousands of hours of volunteer time are committed to collaboratively examine and resolve issues of common interest and further advance progress in Minnesota.

Minnesota e-Health Standards and Interoperability Workgroup

The Standards Workgroup of the Initiative is charged with identifying and recommending nationally recognized standards, implementation specifications and certification criteria necessary to facilitate and expand the secure electronic movement and use of health information among organizations in Minnesota and has been meeting regularly since fall 2007. The charge of the workgroup for 2010-11 is to provide recommendations on the framework for shared directories including approach and principles, as well as recommendations for the creation and use of shared directories and related technical services, as applicable to the state's approach for statewide HIE. The workgroup will hold panel hearings from Minnesota stakeholders and focus discussion on perspectives and value proposition to Minnesota on provider directories. Additional details of the workgroup and meetings can be found at: <http://www.health.state.mn.us/e-health/stndrdshome.html>

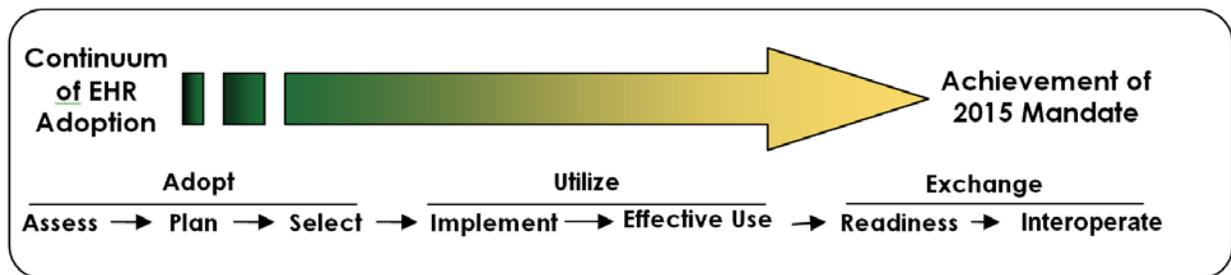
Minnesota Framework & Statewide Approach to Interoperable Electronic Health Records

In 2007, the Minnesota Legislature required the Commissioner of health to develop a state-wide plan for the implementation of interoperable EHR's by 2015. The advisory committee and workgroups developed an approach that is shown in Figure 1 and called the Minnesota Model for Adopting Interoperable Health Records. The approach is intended to provide a logical and practical framework that is inclusive of the more than 1500 different settings and thousands of different health professionals impacted by the Minnesota interoperable EHR mandate.

The Minnesota e-Health Initiative has identified seven major steps in adopting, implementing and effectively using an interoperable EHR. The seven steps can, in turn, be grouped into three major categories:

- **Adopt**, which includes the sequential steps of Assess, Plan and Select.
- **Utilize**, which involves implementing an EHR product and learning how to use it effectively.
- **Exchange**, including readiness to exchange electronically with other partners, and implementing regular, ongoing exchange between interoperable EHR systems.

Figure 1: Minnesota Model for Adopting Interoperable Electronic Health Records



“Provider Directories” in the Context of a Broader Framework of Health Information Exchange

The Minnesota e-Health Initiative views the concept of “provider directories” as a part of broader framework to facilitate electronic exchange of health information. Recognizing that the real value in EHR systems comes from using them effectively and exchanging needed health information on time to facilitate care coordination and decision making, the Initiative will be engaging two workgroups to define and discuss topics related to health information exchange: the Standards and Interoperability Workgroup will look into details of provider directories and Health Information Exchange Workgroup will provide guidelines to facilitate electronic exchange of health information.

Some of the “draft” working definitions and principles identified by the Standards Workgroup are listed below:

Proposed Framework for Shared Directories in Minnesota

- **Working Definition for Shared Directories**
 - Shared Directories are tools which are a resource to enable components of secure health information exchange and include content, policies, functions and standards that facilitate high-quality information to be acquired, stored, accessed, valued and used effectively in support of health information exchange transactions
- **Proposed Principles for Shared Directories**
 - It includes **key components** to facilitate exchange
 - It provides a level of **specificity** so as to be useful
 - It is **dynamic** so that it allows for updating as needed
 - It is **logical** and can be understood in the context of the Minnesota e-health environment

- It **supports the needs of Minnesota** as it relates to the 2015 mandate
- It facilitates the ability to meet **meaningful use requirements**
- It includes **agreed upon definitions** to assist common understanding
- It is **comprehensive** and includes various types of shared directories to enable the routing of health information
 - o *Providers, Patients / individuals, Health care entities (e.g. pharmacies, labs, physician practices), Health Plans, Users for authentication*
- It is **authoritative** and contains accurate and up-to-date data necessary to facilitate exchange within a geographic region
- It is **open** and available to multiple parties for multiple appropriate uses and supports interoperability

Need for “Provider Directories”: Minnesota Example

The Minnesota Department of Health created the “Informatics Profile” for the department as part of Common Ground Project funded by the Robert Wood Johnson Foundation and with technical assistance offered by PHII (Public Health Informatics Institute). The key information systems in the department with person level information (*see Attachment B*) were identified, and detailed interviews conducted to assess readiness for exchange and utilization of standards. A tool kit was created to facilitate state and local health departments to access their informatics capacity which is available at <http://www.health.state.mn.us/e-health/phphin/index.html>. Most of the systems identified use directories of information related to various characteristics of providers (both individual and institutional) providers. There are multiple lists across the agency with varying levels of granularity and accuracy. There is a **demand and value in having an authoritative source of information** in a directory which is easily accessible, accurate and holds sufficient level of detail to support decision making in public health.

As the information is gathered through testimonies and other venues, needs are assessed and recommendations/guidelines are put forth regarding provider directories, it is essential that local/regional needs are addressed and options for flexibility and scalability are considered. Having a clear understanding of the context in which health information exchange entities and the providers are operating – including the framework of state laws and regulations as well as the nuances of the health care community – are essential in order to deliver meaningful assistance in helping providers to meeting “exchange” requirements of “meaningful use” criteria.

As I close this testimony today, I will leave you with some summary thoughts focused around the questions the Provider Directory Task Force has suggested we address:

1. **Do you currently use external provider directories for health information exchange? What are they and how do you use them?**

External provider directories are usually imported from an external source such as a licensing board, regulatory board or state association. This is often used to initially populate the program directory and later to provide changes when they are available. This imported directory is often the base for beginning a program – a specific directory that is custom to a particular application. Maintenance of the data in the directory is done by the program. Feedback of changes to the original source can occur but is not routinely done.

Example is use of Directories in public health programs include the following:

Immunization Information System and related Programs:

Example sources of information for provider and facility directories.

- List of hospitals starting with and updates from MDH licensing program
- List of day care centers from Minnesota Department of Human Services (DHS)
- List of schools from Minnesota Department of Education
- List of clinics from the Minnesota vaccine for children's program.
- Access to licensed physician list from Disease Investigation division

These directories are used for a number of program activities related to lists vaccine history, case follow-up and communications related to policy, vaccine use and monitoring. An accurate, authoritative, and shared directory would be a valuable service.

Disease Surveillance System – Acute Diseases:

Example sources of information for provider and facility directories.

- Directories include facilities and contain clinics and hospitals.
The lists are started from licensing sources and updated with case management information by program staff.

The programs would use an accurate and authoritative source of information that can be relied on for updated information.

Local public health system:

There are 92 Local Health Departments in Minnesota. The local health departments operate independently from the Minnesota Department of Health. Although their needs vary by agency The lists are maintained by each health department.

Here are some examples of uses.

- List of hospitals in the community and region wide.
- List of physicians in the community
- List of licensed facilities in the area (motels, hotels etc)
- List of day care centers
- List of non-profits (crisis receiving units, Head Start, Hand in Hand etc)

Public Health Laboratories

The Minnesota Department of Health Public Health Laboratory maintains a number of laboratory information systems to support the work of the lab. These systems maintain and use lists for facilities and provides to support their work. Some examples are:

- Hospitals with sub-areas identified. These could specific labs, emergency departments, newborn nurses and others. Direct contact for follow-up such as for new born screening may be required.
- Directories that contain a wide range of individual and role based information are required. The breath of need includes physicians, midwives, public health nurses, labs, veterinarians and others.

The directories often contain physical address, phone, fax numbers and email addresses. Maintenance of the directories is a significant issue to maintain completeness and accuracy of the information. For example each year, nearly 4000 presumptively positive specimens are identified and directory information is required for urgent contact and follow-up often involving contact with multiple facilities and individuals.

The directories maintain lists for HIPAA compliant fax numbers and directories are needed to maintain secure routing information for electronic exchange.

2. Do you currently maintain an internal provider directory?

Most of the public health programs maintain an internal provider directory which is not dynamically linked to outside directories. The frequency of updates from external sources varies and is often not regular.

- If so, how do you validate and maintain it?
These program-focused directories are not part of a larger system directory and are usually maintained separately in small databases and excel files. Lists are updated as corrections are found. Independent full list validation is not typical. When an error is found it is fixed and no feedback currently exists to relay the error to source of list.
- Also if so, would your organization find value in using a third party directory to help maintain/support your internal directory?
Yes, there is great value in validated and well-maintained third party sets of directories. The types of data fields used and content will need to meet the program needs.

3. What uses would you have for these two types of provider directories? Would you use them? If not, why not?

- **Yellow pages:** An authoritative resource listing clinicians and entities that is used to “look up” providers and point to routing directories
- **Routing directory:** routing registrar to provide addressing hierarchy/service to enable machine-to-machine routing in context of health information exchange activities

There is need for both kinds of directories in public health. Routing helps to relay the message across to the receiving stakeholder and is vital in electronic exchange of health information. The public health activities have multiple contacts and feedback loops and follow-up, yellow pages can provide that authoritative source of information to reach needed clinicians and entities.

The value of the directory increases with its dynamic use where frequent updates can reflect more current reality and inclusion of sufficient level of detail to support decision making in public health.

Thus the specification for directories need to be aligned with the core information needed for public health. Example considerations include;

- For example, the list of facility capacity (beds, availability etc.) needs to be updated almost daily and physician demographics must be updated at least monthly
- The directories must be configured such that changes are highlighted, and allow only needed elements and updated ones to be downloaded.
- Pricing must be reasonable
- Directory approaches should be scalable and flexible to meet local/regional needs and requirements.
- Addressing for sub-units/parts of larger facilities such as hospitals are vital.
- Directory linking individuals and facilities are an important element.
- Role based functions for individuals are a critical need for messaging in urgent situations. An example is individuals responsible for actions related to newborn screening and follow.

4. What set of clinicians and entities need to be included to enable your use cases?

- Would it need to include individual clinicians, or is the entity sufficient?

The programs need information on both levels. Directories containing information on entities and individual clinicians are needed. Role-based contact for individuals, such as infection control director in a hospital, is an essential capability. This implies a capability for a hierarchy that allows for information to be pushed to particular stakeholders in the organization.

5. What information about clinicians and entities need to go into the provider directory in order to make it useful for you?

- For example, provider type, specialties, credentials, demographics and service locations
Physician:

- Need for all of the above information for direct contact
- Include sufficient contact details (emails, phone)
- Need role-based information on clinicians (for example, a person may hold multiple titles like Medical Director, Infection Control Practitioner (ICP), Professor etc)

Facilities:

- Need role-based contacts for facilities too (for example, for a hospital directory, list of Infection control directors and employee health contacts would be useful)
- Need sufficient level of detail to support decision making (for example, during public health referral process, it would be immensely helpful to have list of nursing home facilities in the area, their current capacity, available beds, the clientele they accept and their staffing so that information is discussed with patient/client and appropriate referral made. This offers huge benefit to the client family as so they are not left on their own and public health is involved in decision making)

6. What data or information about your organization or clinicians could be made available to establish directories?

- Issues to be resolved?

The routing information of most major systems in a state health department can be made available. This would facilitate reporting to public health. The information needed to create yellow pages for a health department could be easily shared as well.

The issues that need to be addressed are any related policy, privacy and security questions including updating of the information and secure end-to-end routing.

7. If your organization maintains a provider directory, would you allow it to be accessed by outside parties in a federated structure? If so, what requirements would be necessary?

Yes, the information held in provider directories across various programs can be shared, as it is all publicly available data which are also held by multiple other entities. For example, details of a clinician would be held by multiple organizations like their practice, all organizations they are affiliated with, health plans, medical board etc.

8. What “trust framework” is needed for populating, maintaining and using provider directories?

- Are there specific issues (reliability, trust, privacy, uses of data, others) you would like to make sure are addressed with respect to provider directories

Limited private data about any individual or organization would be included in these directories. The trust framework needs to be sufficient to assure integrity of the accuracy and reliability of the information and must include sufficient levels of authorization and authentication. We need to ensure that communications containing private data are only exposed to clinicians in the appropriate organizations.

9. Can the business interest of existing data suppliers or directory owners be aligned so that they would be willing to help populate, maintain and use an authoritative directory? Is this a desirable goal? Is it feasible?

The data held in public health directories (routing and yellow pages of key personnel) can be shared. Public health agencies need to be ready to identify specifications so the potential for sharing information on directories can move forward.

Questions primarily targeting yellow pages resource

10. What data and level of data accuracy of the directory is needed for your use of a yellow pages resource?

- **A high level of accuracy and currency is desired. The need will vary by program.**

a. Is it important that it identify all practice locations for a clinician?

Yes

b. How important is it that it is authoritative and complete, for instance containing all licensed physicians in a state?

- For some programs it is very important. For some role-based identification is sufficient.

c. What data elements are critical?

The specifications will vary for some fields by program. We envision a core set of directory data that is a national standard. This will likely be in several distinct categories. We also envision some local data that will be specific by agency. These can be agreed to by type of agency. Third level of data is the need by specific program.

Some example types:

- Provider type
- Specialty
- Credentials
- Demographics
- Service locations
- Sufficient contact details (emails, phone)
- Role-based information on clinicians (for example, a person may hold multiple titles like Medical Director, Infection Control Practitioner (ICP), Professor etc)

There is a need for role-based contacts for facilities as well. For example, for a hospital directory, list of Infection Control directors and employee health contacts would be useful.

- 11. How do you currently maintain the accuracy of your information in third party directories, such as those maintained by medical boards, health plans and commercial services (lab, pharmacy, etc)?**

Third party directories are usually imported and used as a starting point for new directories and then serve to provide information to update to the program directory. Content of the directories are not typically validated and when an error is found it is fixed and limited feedback convey the error to source of list.

- 12. What's the best way to motivate providers and entities to keep directory information up to date (e.g., link to licensing, plan participation, health information exchange activities)?**

A combination of multiple mechanisms as listed above including links to licensing, plan participation and the like should be considered.

- 13. What data or information about your organization or clinicians could be made available to establish a directory?**

- a. Issues to be resolved?
- b. If your organization maintains a provider directory, would you allow it to be accessed by outside parties in a federated structure? If so, what requirements would be necessary?

Yes, these can be specific public information held in directories across various programs that can be shared. Specific end-points for public health reporting can be named.

Attachments:

- A. Acknowledgements: Minnesota e-Health Advisory Committee
- B. List of Select Information Systems in the Minnesota Department of Health