Implementation/Usability Hearing

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Instructions and Questions for Panelists

Purpose: The HIE and Interoperability Panel will help to inform recommendations prepared by the HITSC and HITPC on innovative approaches to achieving the interoperability required for meaningful use stage 2 and possible interoperability requirements for Stage 3.

(Please answer as many or as few of the questions as your experience and/or the time allows.)

1. Describe how you will address the meaningful use requirements for the inter-organizational transitions of care in Stage 2.

Currently, Mayo has links to two peer-to-peer based networks, one regionally based (SE MN Beacon) and the other nationally based (Care Connectivity Consortium). Both are in operation and both are CONNECT (pull) based exchanges. We anticipate that we will continue to utilize these exchanges moving into Stage 2 Meaningful Use, however we are also aggressively looking at establishing a DIRECT (push) based solution by the end of this year. We expect to meet the MU 2 requirements for 10% exchanges based on this new DIRECT solution.

As we implement the new DIRECT solution, we expect an initial decrease in efficiency. The paper and faxed based processes currently in use are deeply embedded into staff workflows and over the years, these transitions of care processes have become very efficient. Our biggest challenge then is to implement the new technology without it being a burden to clinicians' workflow.

2. Will you use the Direct standards to meet interoperability requirements for Stage 2? Are your business partners prepared? Do you anticipate challenges because EHR vendors may require the use of a specific HISP? What new EHR

capabilities required in Stage 3 or beyond would facilitate better exchange of health information (please identify the use case and the capability)?

Yes, we are relying heavily on our EMR vendors to deliver DIRECT solutions in a timely manner. This is a challenge as EMR vendors faced with new Meaningful Use mandates typically deliver solutions "just in time" to meet the minimal requirement. This creates a challenging situation for the EMR customer who must install a major software update before being able to pilot and refine the functionality.

Once again, workflow and process is the key when working with our business partners. Since we have yet to receive DIRECT functionality from our vendors, we do not have a good sense of how to incorporate new process changes into existing workflows.

At Mayo Clinic, we use multiple EMR vendors along with niche applications and internally developed applications. When vendors' require the use of a specific or proprietary HISP it reduces interoperability. When vendors create proprietary or closed networks, or use proprietary technology for exchange, it reduces interoperability and limits the expansion of HIE. We look to organizations such as DirectTrust.org and HealtheWay to help set the direction for connectivity and to enable a nationally based, open-exchange model

There are EMR/HIE capabilities and policies that Mayo Clinic endorses:

- National patient identifiers
- A standardized patient authorization process rather than multiple state-based laws
- More data-rich exchange payloads. Current discharge summary standards hold a lot of information but are weak in their management of their provenance (e.g. when created, who is the author, patient metadata). We also believe that the documents incorporated into the Summary Document need to be able to stand on their own.
- Open source HIE solutions

3. What approaches will you use to meet the HIE requirements for Stage 2, and what challenges have you identified?

We are relying on our EMR vendors. When possible, we are utilizing reference standards and validation testing tools then focusing on integration and management of the process changes needed to be implemented within our large and complex practice. We know from our past experiences that obtaining timely, low cost, high-quality solutions that work is always a challenge.

4. What have vendors done to support interoperability between certified EHRs? What gaps remain to support exchange between certified systems?

From what we can see, the EMR vendors have been focused and driven to meet the minimal certification requirements for Meaningful Use. The overall practical usability, flexibility to support optional features which translate sending and receiving content into useful and efficient patient care seem to be somewhat lagging.

Variability that is inherent within the current standards makes interoperability between vendors a technical challenge. Mayo Clinic supports continued refinement of the standards and protocols used.

5. What HIE services are most important in meeting EHR use requirements?

Without an underlying national patient index cross reference, or NPI, current solutions suffer from either automated patient correlation inaccuracy or an additional clerical support to enable correlations. The same issue holds true for provider directories in DIRECT exchanges.

Mayo Clinic favors a national patient consent model due to the lack of harmonization between state laws.

6. Have you experienced any challenges with interoperability when both systems were purported to be certified for the intended purpose? Were there additional challenges to get the exchange to "really work"? What were the solutions you applied?

Barriers to seamless interoperability include:

- Inability to properly match patient identities
- Variability in document standards
- Proprietary vended solutions
- Limited set of patient data exchanged

Due to the relative newness of HIE technology, connectivity and technical infrastructure stabilization is an issue. It calls for periodic system review and increased interconnectivity testing across exchange partners.

7. Have you made or received electronic transitions of care to healthcare providers including skilled nursing facilities and home care agencies and if yes, have you encountered barriers and how have you converted the barriers into successes?

While we have done some preliminary DIRECT exchanges with the open-source reference standard, we have not made or received any real DIRECT-based electronic transitions of care from our EMR to other healthcare entities. We expect that the solutions delivered to us by our EMR vendors will be "just in time" and meet the minimal technical requirements for Meaning Use Stage 2 certification. Our challenge as a patient care provider is that while we don't fully understand the solution that vendors will deliver, we must prepare for the inevitable process changes needed to implement these solutions within Meaningful Use timelines.