Health IT Policy Committee

A Public Advisory Body on Health Information Technology to the National Coordinator for Health IT

Clinical, Technical, Organizational and Financial Barriers to Interoperability Task Force

Paul Tang, chair

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Membership

First Name	Last name	Type	Organization
Paul	**Tang**	**Chair**	Palo Alto Medical Foundation
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Agenda

- Review of charge and process
- Summary of past HITPC work related to interoperability
- New recommendations to accelerate the pace of progress towards widespread interoperability

Joint Explanatory Statement in the Congressional Record on 2015 Omnibus Bill

- *Interoperability.--The agreement directs the Health IT Policy Committee to submit a report to the House and Senate Committees on Appropriations and the appropriate authorizing committees no later than 12 months after enactment of this act regarding the challenges and barriers to interoperability. The report should cover the technical, operational and financial barriers to interoperability, the role of certification in advancing or hindering interoperability across various providers, as well as any other barriers identified by the Policy Committee.*

Objectives of Report

- Summarize the barriers causing slow progress towards interoperability
- Summarize past HITPC recommendations related to interoperability
- Explore financial and business barriers
- Make near-term recommendations to accelerate the pace of progress

Summary of past HITPC work related to interoperability

Categories of Barriers to Interoperability

- Lack of universal adoption of **standards-based EHR systems**
- Changes in **operations workflow** among providers
- Complex challenges of **privacy and security** associated with widespread health information exchange
- Difficulty of establishing synchronous **collective action** among multiple participants
- Weak, and in some cases misaligned, **incentives**

Lack of universal adoption of standards-based EHR systems (1)

- Need a critical mass of providers to have EHR systems that can exchange clinical information with other providers
- Meaningful Use program has been successful at increasing the use of EHR systems across the country
- Federal EHR certification has played a critical role in preparing the industry for interoperability
  - Exchange of electronic, standards-based CCDs has grown significantly since the beginning of Meaningful Use Stage 2
- E-prescribing and lab results delivery are successes, improving efficiency, quality and safety

Lack of universal adoption of standards-based EHR systems (2)

- EHR-to-EHR interoperability has progressed more slowly due to fragmentation and diversity of providers and EHR systems
- APIs are a promising development aligned with the rest of the internet economy
- Vendors are now responding to many of the same technology and market forces that have opened up information exchange across the internet

Changes in operations workflow among providers

- Injecting a new technology forces changes in workflow
- Fragmentation of healthcare delivery systems and lack of standardization in care processes makes it particularly challenging in healthcare
- MU Stage 2 introduced significant EHR-to-EHR interoperability requirements (Summary of Care - sending of CCD to the next setting of care)
- Actual exchange of information uncovered the next level barrier, challenges *incorporating* CCDs
- MU Stage 3 will require that providers meaningfully receive and act on CCDs from other entities

Complex challenges of privacy and security associated with widespread health information exchange (1)

- Ensuring adequate privacy and security protections is extremely important to providers and patients
- Electronic systems require specific configurations which force formalization of policies and practices that, in a paper-based world, are more informally articulated
- Interpretations of HIPAA have been shown to vary widely in the market
  - Misinterpretations of complex privacy laws inhibit providers from exchanging information as freely as HIPAA allows
  - Many providers do not understand the details associated with the HITECH-enhanced right to electronic access

Complex challenges of privacy and security associated with widespread health information exchange (2)

- The need to fully understand variations in state laws and implement processes and technology functions to enforce them presents a hurdle to interoperability for which there is no single, nationwide solution

Difficulty of establishing synchronous collective action amongst multiple participants (1)

- For each successful exchange, multiple parties must act collectively – at the same time
- Effective interoperability requires agreement among all of the participants on certain "rules of the road"
- Networks are emerging to implement specific technologies and policies among groups of participants with a shared common interest
  - These networks, serve a valuable purpose in reaching the "last mile" of the health information exchange spectrum

Difficulty of establishing synchronous collective action amongst multiple participants (2)

- Setting a vision for the portfolio of HIE functions that will support nationwide interoperability and defining the standards and policies that will bridge existing and future networks are important next steps in achieving ubiquitous health information exchange
- The federal government plays a unique role in health care as a large and influential market actor and can play a significant role in shaping the future of nationwide health information exchange

Weak, and in some cases misaligned, incentives (1)

- A key inhibitor to health information exchange has been economic incentives
  - At best, have not encouraged, and at worst, have even discouraged, sharing of clinical information among providers
- Traditional fee-for-service payment models do not create incentives to make health information exchange processes and technologies a higher priority
  - Depending on the market, providers not necessarily demanding it
  - EHR development efforts historically not focused on interoperability
- Interoperability is critical to achieving value-based care delivery, prescribed by the ACA

Weak, and in some cases misaligned, incentives (2)

- Motivation from HHS' recent announcement that it will convert 30% of fee-for-service payments to alternative payment models by the end of 2016
  - Private health plans accelerating their transition to value-based models
  - Providers fundamentally altering their care-delivery processes and technology demands to support
- Growing impatience about whether the pace of progress on interoperability is sufficient to support the pace of payment reform

Exploring Financial and Business Barriers to Interoperability

Charge Questions Pertaining to Financial Barriers

- What financial/business barriers to interoperability exist in the ecosystem?
  - Where do the barriers lie? i.e., which stakeholders?
  - What's the impact of the barriers/practices on the ability of other stakeholders to interoperate?
- Which of these are being addressed by initiatives underway today? Where is progress being made? Where do the gaps still exist?
- What actions need to be taken to address these financial barriers/practices?

Conducted Virtual Hearings

Recommendations for Near-Term Actions to Accelerate Progress Towards Interoperability

Recommendation 1 (1)

Develop and Use Meaningful Measures for Consumers and Payers

- **Findings**
  - Current performance measures are generally process measures that are not specific and meaningful enough to inform consumer choice
    - Consumers need understandable 'measures that matter' to chose providers and health plans
    - Providers need clear, actionable measures to assess and improve impact under payment reform
  - Traditional measure developers are not adequately producing measures that matter or effectively leveraging new HIT infrastructure
  - Needs development funding

Recommendation 1 (2)

Develop and Use Meaningful Measures for Consumers and Payers

- **Recommendation 1**
  - **Fund development and use of meaningful measures of HIE-sensitive health outcomes and resource use for public reporting and payment that focus on:**
    - Coordinated care
    - Affordable care
    - Example HIE-sensitive measure: “no reimbursement for medically unnecessary duplicate orders”

Recommendation 2 (1)

Meaningful Measures of Developer Performance

- Background
  - One-time in-lab certification neither predicts affordable, practical implementation or effective use
  - Lack of transparent performance measures to assess product capabilities and sustained field-performance of vendors
    - Needed to inform choice by providers
    - Needed to inform surveillance function for certification and regulation
  - No entity is currently developing such measures. A coordinated, multi-stakeholder effort to define such measures is required. Federal resources would help speed progress towards a single set of measures that could be reported on across vendors

Recommendation 2 (2)

Meaningful Measures of Developer Performance

- **Recommendation 2**
  - **Fund development and use of HIE-sensitive vendor performance measures for certification and public reporting**
    - Example set:
      - # of exchanges of external data (denominator)
      - % of external data elements viewed (numerator)
      - % of external data elements incorporated/reconciled (meaning)

Recommendation 3 (1)

Accelerate Payment Incentive for Interoperability

- **Background**
  - Lack of palpable financial imperative favors status quo
    - "Pay for value" is broad; achieving interoperability requires collective action around specific mandatory objectives with fixed timelines
  - Pressing internal priorities compete for attention and resources needed to achieve interoperability when specific actions to enact interoperability are unclear
  - Identifying specific criteria (i.e., performance measures) for future payment incentives, with enough lead time, can motivate and catalyze specific actions to speed the pace of achieving effective health information exchange that facilitate high priority objectives

Recommendation 3 (2)

Accelerate Payment Incentive for Interoperability

- **Recommendation 3**
  - **Set specific HIE-sensitive payment incentives – including specific performance measure criteria – and timeline for implementation that establish clear objectives of what must be accomplished under alternative payment models**
    - Example HIE-sensitive measure domains:
      - Coordinated, high quality, safe care (e.g., use of shared care plans)
      - Coordinated across health and social services continuum (e.g., close the loop notifications)
  - **Incorporate mechanisms that identify and discourage information blocking activities**

Recommendations 4 (1)

Initiate Sustained Multi-Stakeholder Action

- Background (what's changed and what's learned)
  - Secretary has set a timetable for delivery system reform
  - Information landscape has changed dramatically – EHRs now widely adopted
  - ONC Interoperability Roadmap published; need public-private action
  - Siloed or sporadic activities starting up, but not coordinated or tied to blueprint
  - Collective action by broader set of stakeholders required – in synchrony
  - Without specific charge and specific timeline by all stakeholders, collective action called for in Roadmap will not occur fast enough
  - Need convening power of federal government to spur collective action, and enduring private-sector business interests to sustain the effort

Recommendations 4 (2)

Initiate Sustained Multi-Stakeholder Action

- **Recommendation 4**
  - **Convene major-stakeholder working Summit co-led by federal government (e.g., ONC, CMS) and private sector to act on ONC Roadmap to accelerate pace of change toward interoperability**
  - **Outcome**
    - Enumerate and define action plan with milestones and accountabilities to achieve widespread interoperability
    - HITPC could provide venue for quarterly progress reports that help ensure coordination and accountability of the public-private efforts organized at the working Summit to accelerate progress towards widespread interoperability

Summary

- Achieving interoperability in healthcare is substantially more complex than other homogeneous domains (e.g., ATM and banking)
- Yet, interoperability and meaningful health information exchange are critical to delivery system reform (DSR)
- And the current pace of progress on interoperability will not meet the timelines of DSR
- The ITF believes we must convene the multiple stakeholders to define a national work plan and commit to the synchronous, collective actions we have enumerated in this report
- To accelerate achieving interoperability, clear and specific financial incentives tied to HIE-sensitive measures that matter to consumers, providers, and payers must be defined in the near term

Discussion

Virtual Hearing

Appendix A has a summary of previous related HITPC recommendations

Lack of universal adoption of standards-based EHR systems (1)

- HHS should consider opportunities for certifying technology to facilitate value-based purchasing activities that go beyond the MU foundation.
- HHS should work to simplify and harmonize requirements across advanced payment models for public and private payors.
- The health IT certification program should consider a requirement by which vendors would demonstrate that they can easily integrate with other applications.
- Facilitate consensus around shared approaches to standards-based electronic shared care planning across the continuum of care to promote wider adoption of these tools.

Lack of universal adoption of standards-based EHR systems (2)

- Drive progress on standardization and capture of social determinants of health data elements that are critical to accountable care and other delivery models.
- Promote greater standardization for social determinants of health data, including data reported by individuals, families and caregivers, and related performance measures.
- Promote greater standardization and usefulness of human services and clinical data across systems utilized by all health and service professionals, caregivers, individuals and their families.
- Pursue greater specificity in federal interoperability standards around transactional data. Look for opportunities to increase specificity around transactional data such as discrete HL7 data feeds for admissions, discharges and transfers, notifications, labs, prescriptions, etc., as well as further specification of structured data within the CCDA.

Lack of universal adoption of standards-based EHR systems (3)

- Pursue greater specificity in federal interoperability standards around transactional data. Look for opportunities to increase specificity around transactional data such as discrete HL7 data feeds for admissions, discharges and transfers, notifications, labs, prescriptions, etc., as well as further specification of structured data within the CCDA.
- Explore better individual identity-matching strategies to facilitate aggregation of data across clinical and non-clinical settings and other high-priority use cases.
- Strengthen data portability elements in certification criteria to ensure systems have demonstrated that they can receive and process data, not only send data. Expand testing procedures for certified EHR technology that require products to demonstrate the technical ability to not only send discrete data points in a recognized, structured, and consumable manner, but also receive and make data computable within a receiving application.

Lack of universal adoption of standards-based EHR systems (4)

- Limit the scope of certification to those functions critical to interoperability and outcomes improvement. Suggested priority areas include interoperability, clinical quality measurement, and privacy and security.
- Nationwide shared services. Developing standards for, and ensuring deployment of, universally necessary shared services that are highly sought after and thus would facilitate DSN alignment, such as public use licensed vocabularies, and perhaps nationwide healthcare provider and entity directories, etc.

Lack of universal adoption of standards-based EHR systems (5)

- When considering whether to pursue any new certification initiative, consider the below Five Factor Framework, asking whether the proposed certification initiative would:
  - Advance a National Priority or Legislative Mandate: Is there a compelling reason, such as a National Quality Strategy Priority, that the proposed ONC certification program would advance?
  - Align with Existing Federal/State Programs: Would the proposed ONC certification program align with federal/state programs?
  - Use the existing technology pipeline: Are there industry-developed health IT standards and/or functionalities in existence that would support the proposed ONC certification program?
  - Build on existing stakeholder support: Does stakeholder buy-in exist to support the proposed ONC certification program?
  - Appropriately balance the costs and benefits of a certification program: Is certification the best available option? Considerations should include financial and non-financial costs and benefits.

Complex challenges of privacy and security associated with widespread health information exchange (1)

- Explore regulatory options and other mechanisms to encourage appropriate sharing of information protected under 42 CFR Part 2 across participants in an accountable care organization.
- Provide clarifying guidance and disseminate best practices about privacy considerations associated with sharing of individual data among HIPAA covered entities and other community organizations.

Complex challenges of privacy and security associated with widespread health information exchange (2)

- Promote Fair Information Practice Principles (FIPPs)-based protections for data outside
- of HIPAA:
  - Voluntarily adopt self-governance codes of conduct. In order to credibly meet the requirements of both protecting sensitive personal information and enabling its appropriate use. Codes must include transparency, individual access, accountability, and use limitations.
  - U.S. Department of Health and Human Services (HHS), Federal Trade Commission (FTC), and other relevant federal agencies should guide such efforts to more quickly establish dependable "rules of the road" and to ensure their enforceability in order to build trust in the use of health big data.

https://www.healthit.gov/sites/faca/files/HITPC_ACWG_RecommendationsTransmittalLetter.pdf
https://www.healthit.gov/sites/faca/files/HITPC_AHM_Hearing_Transmittal_08-11-2015_0.pdf
https://www.healthit.gov/sites/faca/files/HITPC_Health_Big_Data_Report_FINAL.pdf

Difficulty of establishing synchronous collective action among multiple participants

- Any increase in regulatory authority should be carefully considered through evaluation of reasonable and meaningful benchmarks, and specifically calibrated to address remaining barriers that the market has failed to overcome.
- Some suggested priority areas for certification included interoperability, clinical quality measurement, and privacy and security. To be effective, overarching governance and public-private collaboration would be needed.

https://www.healthit.gov/sites/faca/files/Joint_HIPC_HITSC_JTF_Final%20Report_2014-10-15.pdf
https://www.healthit.gov/sites/faca/files/Certification_Hearing_2014-06-24.pdf

Weak, and in some cases misaligned, incentives

- Increase public transparency around hospital and health system performance on measures related to health information exchange through public reporting websites.
- Coordinate across HHS to expand support for the development of state-level all-payer claims databases to support accountable care arrangements (inclusive of Medicare & Medicaid)
- Integrate clinical data with claims, cost, and price data across participating payers and providers to support less burdensome reporting of quality metrics, helping providers to improve quality and reduce costs, and improve specificity of predictive modeling.
- Advance progress by articulating a strategy for how the federal government will engage with the various entities capable of receiving and aggregating data at the local, regional, and state level.

https://www.healthit.gov/sites/faca/files/HITPC_ACWG_RecommendationsTransmittalLetter.pdf