The Future of Healthcare Information Technology

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A Brief History of Time

• The National policies from Brailer to DeSalvo

• Interoperability - from HITSP to Argonaut

• Patient/Family Engagement - from a rogue idea to OpenNotes

• Big Data Analytics - from managed care to care management

• Cloud/Mobile - from Palm Pilots to CareKit
Assessing Our Progress

• EHR - safety/quality, efficiency, physician satisfaction

• Interoperability - is the data you need there when you need it without difficulty or significant cost?

• Patient/family engagement - are we bringing value to the patient with our electronic tools?

• Big Data Analytics - are we supporting alternative payment models and value-based purchasing?

• Cloud/mobile - are EHR vendors, clinicians, and compliance departments embracing cloud hosted, mobile friendly options?
Assessing Our Progress

- EHR - 80% adoption of EHRs but with 453 clicks to admit a patient, 140 structured data elements per encounter to support clinical quality measures, 40% of clinicians feel burned out (C+)

- Interoperability - we’ve made reasonable gains with pushing payloads from place to place, but have not built the enabling infrastructure to support pull (C+)

- Patient/family engagement - we’re making reasonable progress with portals but we need an app that enables true patient stewardship of data (B)

- Big Data analytics - many products compiled in Powerpoint (B)

- Cloud/mobile - we need to accept that risk can never be zero (B)
We Can Do Better

• EHR - my wife’s recent experience and the need for Facebook/wikipedia

• Interoperability - my mother’s recent experience with a hip fracture

• Patient/Family engagement - my recent experience with hypertension

• Big Data Analytics - my wife’s cancer experience

• Cloud/Mobile - my current journey with multiple vendors
Mobile Applications Currently Available

Clinician Apps
- Dragon
- LifeImage Mobile
- Medical Recorder
- Inpatient Med Lists
- eyeRad
- MyICU

Patient Questionnaires
- PatientSite
Patient Generated Healthcare Data

PatientSite

Questionnaire Service (example ePROs)

webOMR

BIDMC Internet of Things (IoT) Server

- Email Messaging
- Appointment Requests
- Prescription Renewal
- Referrals Request
- BIDMC @Home Permissions
- BIDMC @Home Readings
- Patient Record Access*
- Open Notes Access*
- Registration Info Update*
- Appointment Cancellation*

Launch

View

Launch

View

Launch

View

Get Questionnaires

Upload Subjective Measures

Current connectivity

Future connectivity

* WebOMR Integrated
* Integration Planned

Upload Objective Measures

Upload Measures

BIDMC @Home App

Supports

View Measures
Security Concerns

• Risk Management
• Identity Management
• Logging and Monitoring
• Policies, Procedures, and Governance
• Logging and Monitoring
• Managed Security Services
• Data Classification
• Physical Security
• Configuration Management
• Third Party Auditing
Next Steps

- Meaningful Use has run its course - we must move to outcomes based payment models for clinicians and hospitals
- Certification in its current form paralyzes innovation and does not improve interoperability
- We need a national provider directory, a voluntary national patient identifier, a trust fabric, a governance framework, and consistent privacy policies
- We must reduce clinician burden
- Return the agenda to the private sector
Questions?

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