HIT STANDARDS & INTEROPERABILITY COLLABORATIVE



ONC "Draft Detailed" Use Case Overview: Consultations and Transfers of Care

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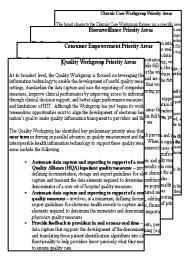
February 6, 2008



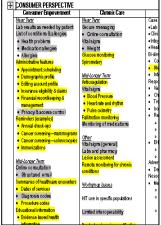
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- Use Case Development Process Overview
- Feedback Received from 2008 Prototypes
- 2008 Draft Detailed Use Cases Overview
 - Consultations & Transfers of Care
 - Remote Monitoring
 - Personalized Healthcare
 - Patient Provider Secure Messaging
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 - Public Health Case Reporting
- Feedback Process
- 2008 Draft Detailed Feedback Due February 15, 2008
- Discussion / Q&A

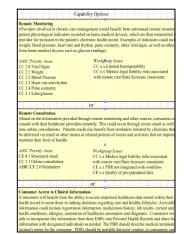




AHIC workgroup priorities and issues



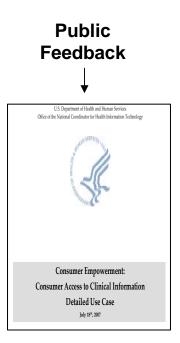
Priorities and areas clustered for coordination and synergy



Use case options for AHIC prioritization



Prototype Use Case



Detailed Use Case Page 3



AHIC Priorities and Use Cases

- Use cases are descriptions of events that detail what a system (or systems) need to do to achieve a specific mission or stakeholder goals
- Use cases convey how individuals and organizations (actors) interact with the involved systems and strive to provide enough detail and context for follow-up activities to occur
- Usually, the follow-up from a use case is work that leads to the development or implementation of a specific software system

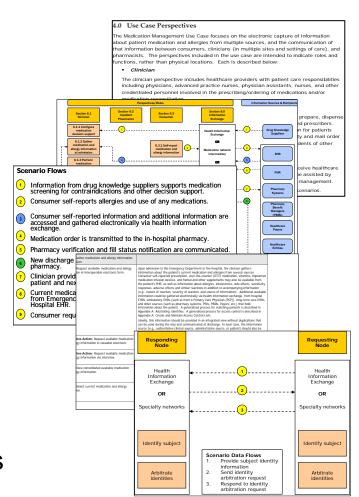


AHIC Priorities and Use Cases

- ONC has been using high-level use cases that are not about the development of a specific software system, but are about the needs of many systems, stakeholder organizations, and individuals
- The use cases are based on the priorities expressed by the American Health Information Community working groups and describe involved stakeholders, information flows, issues, and systems needs that apply to the multiple organizations participating in these areas
- The use cases strive to provide enough detail and context for standards harmonization, architecture specification, certification consideration, and detailed policy discussions to advance the national HIT agenda
- These high-level use cases focus, to a significant degree, on the exchange of information between organizations and systems rather than the internal activities of a particular organization or system



- Preface
- Introduction (Including Scope)
- Stakeholders
- Issues & Obstacles
- Perspectives
- Scenarios
- Information Exchanges
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Feedback Received from 2008 Prototypes



Prototype Use Case

- High-level overview of use case direction
- Does not document all events and actions
- Opportunity for feedback before detailed use case

Detailed Use Case

- Fully describes events and activities from different perspectives
- Adds alternative flows of events
- Based on feedback from prototype use case
- More detail regarding relevant data sets
- Includes information flows

Feedback Received from 2008 Prototypes



Embryonic nature of the prototype use case was intended to encourage more formative feedback early in the development process.

- Received Responses from 57 organizations/Individuals
- Consisting of 126 feedback documents
- Containing over 1150 feedback items





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2006

AHIC Priorities and Use Case Roadmap

2007 Use Cases

2008 Use Cases

2009 and Bevond

Consumer **Empowerment Use Case**

Registration Medication History

EHR

Use Case

Laboratory

Reporting

Result

Consumer Access to Clinical Information

- Access to Clinical Data
- Permissions
- Provider
- PHR Transfer

Emergency

Responder

EHR

On-Site Care

Emergency Care

Definitive Care

Authentication

and Authorization

Provider

Remote Monitoring of Vital Signs and Labs (Glucose)

Consultation &

Transfers of Care

Problem Lists

Transfer of Care

Referrals

Remote

Monitoring

Remote Consultation

- Structured email Reminders
- On-line Consultation

Personalized

Healthcare

Genomic Data

Family Medical

Laboratory

Genetic /

History

CE 3.0 Administrative features CE 3.1 Appointment scheduling CE 3.2 Demographic profile E 3.3 Editing account profile

- 3.5 Financial recordkeeping & agement CE Reminders (examples)
- CE 4. Annual check-ups CF 4. Cancer screening mammarams
- CF 4.3 ancer screeningcolonosc
- CE 4.4 Im nunizations CE 6.0 Summaries of healthcare
- encounter CE 6.1 Dat s of services
- CE 6.3 Producture codes CF 7.0 Educational information CF 7.1 Evidence based health information
- CE 8.0 Decision support CE 8.1 Share decision making CE 8.2 Comn unications
- preferences CE 9.0 Patien health outcomes CE 9.1 Adverevents
- CE 9.2 Medic errors CE 9.3 Patien reported health
- outcomes CC 3.0 Gluco e monitoring CC 4.0 Spiror etery CC 5.0 Anticongulation
- CC 7.0 Fall/n otion monitoring CC 11.0 Leson assessment CC 12.0 Repote monitoring for
- chronic con tions CC 13.0 HI use in specific population
- CC 15.0 P duct and services certification
- CC 16.1 tate licensure constraints atient identification for CC 18.0 tion and authentication Clinical/encounter notes
- 0 Anatomic pathology resu EHI 8.0 Radiology reports
- 12.0 Machine readable and eroperable HR 12 1 Encounter notes

- Q 3.1 Clinical decision support AHIC 15.0 Data access/data Q 5.0 Clinical decision support control Q 6.0 Expanded inpatient quality
- measures 3.4 Insurance eligibility & claims Q 7.0 Expanded ambulatory quality missing measures
 - BIO 1.2 Clinical symptomology BIO 1.3 Integration with EHRs BIO 1.4 Health alerting (HA)/email
 - BIO 2.1 Collaborative discussions BIO 2.2 Web pages
 - BIO 3.2 Chemoprophylaxis BIO 3.3 Treatment
 - BIO 3.4 Isolation/quarantine
 - BIO 3.6.2 Disease registry BIO 4.0 Adverse event reporting
 - BIO 4.1 Devices, drugs, biologic BIO 5.0 Nosocomial infections
 - BIO 5.1 Medication errors BIO 5.1.1 Ordering/ prescribing/
 - dispensing BIO 5.1.2 Drug-drug, drug-allergy interaction decision support BIO 5.1.3 Linkage to FDA
 - structured product labeling database results BIO 10.0 Public health information
 - network (PHIN) can be leveraged BIO 14.0 National notifiable disease conditions have been identified AHIC 1.0 Labs, medications, allergies, immunizations
 - AHIC 2.0 Secure messaging/online consultation
 - AHIC 3.0 Bi-directional communications
 - AHIC 4.0 Adverse event reporting AHIC 5.0 Case reporting AHIC 6.0 Clinical decision support
 - systems AHIC 7.0 Identification/ authentication AHIC 8.0 Problem lists
 - AHIC 9.0 Clinical encounter notes AHIC 10.0 Family history/social factors
 - AHIC 11.0 Vitals signs AHIC 12.0 Population health/ conditions
 - AHIC 13.0 Minimum data eat AHIC 14.0 Confidentiality, privacy, & security of patient data

- AHIC 17.0 Infrastructure areas HITSP 2.3 Population health HITSP 3.0 Quality/control
 - measurements HITSP 3.1 Consistency across
 - HITSP 4.0 Clinical device data HITSP 4.1 Glucometers

HITSP 2.0 Secondary uses of data

HITSP 2.1 Clinical research

HITSP 2.2 Clinical trials

- HITSP 4.2 Monitors HITSP 4.2 Smart pump
- HITSP 5.0 Cross use case work on security (standards)
- HITSP 5.3 Authentication models to support chain of trust data exchanges

Biosurveillance **Use Case**

- Visit
- Utilization
- Lab and

- Clinical Data
- Radiology

Quality

- Hospital
 - Measurement and Reporting Clinician
 - Measurement and Reporting
 - Feedback to Clinicians

Medica ion

Manage nent

Reconciliation

Medication

Ambula ory

indications

Contra-

Prescriptions

- Bidirectional Communication
- Adverse Events
- **Public Health Case Reporting**
- Case Reporting
- Labs

- Resource Identification
- Response
- EHR Data
- Immunizations & Management
- Vaccine
- HR 12.2 Radiology reports EHR 12.3 Lab results

- AHIC 16.0 Data aggregation
- AHIC 17.1 Security, network, repositories
- AHIC 18.0 Vital measurements AHIC19.0 Text documents AHIC 21.0 Health literacy (multilingual support)
- AHIC 23.0 Advance directive/living AHIC 24.0 Social/family history
- AHIC 26.0 Medication history AHIC 27.0 E-prescribing
- AHIC 28.0 Standardization of device interfaces
- AHIC 29.0 Care plans/clinical flowsheets
- AHIC 30.0 Provider list AHIC 31.0 Adverse events
- AHIC 32.0 Nosocomial infections AHIC 33.0 Clinical data storage for
- surveillance AHIC 34.0 Case reporting AHIC 35.0 Bi-directional
- communications AHIC 36.0 Lab results
- AHIC 37.0 Anatomic pathology results AHIC 38.0 Radiology reports
- AHIC 39.0 Social history AHIC 40.0 Procedure reports
- AHIC 41.0 Medications AHIC 43.0 Dental
- AHIC 44.0 Workflow integration AHIC 45.0 Int'l public health collaboration
- AHIC 46.0 Legal liability & regulatory barriers AHIC 47.0 Consumer consent
- CCHIT CCHIT 1.0 Patient safety
- CCHIT 2.0 Transfer of care HITSP 1.1.4 Text reports
- HITSP 1.1.5 Numeric results HITSP 1.1.7 Images HITSP 1.2 HIPAA covered entities
- HITSP 1.2.1 X12 Claims attachment

Round 2

Round 3

Round 4



Consultations & Transfers of Care

- Roles and information flows to support consultations
 - Initiate a request for consultation by a provider or patient
 - Communicate relevant clinical findings back to the requestor, patient, and authorized recipients
- Roles and information flows to support transfers of care
 - Exchange of core information needed to accomplish a transition in care between care settings such as emergent, acute, long-term care, homecare between the sending and receiving organizations
 - Exchange of core information for transfer of care between organizations is the focus; information exchange needs for Intra-organizations transfers may be similar and included in the use case
 - Communicate transfer of care information back to the patient and authorized recipients



Remote Monitoring

- Roles and information flows to support communication of data from home monitoring devices to EHRs and PHRs
 - Transmit measurement data to EHRs and PHRs
 - Review of monitoring information by clinicians and care coordinators
 - Communicate monitoring-related information from care coordinators to clinicians (e.g. assessment information, patient coordination details, summary data)



Personalized Healthcare

- Roles and information flows to support Personalized Healthcare
 - •Clinician intake of patient's past medical history, current medical status, and family health history
 - Clinician assessment and selection of appropriate genetic/genomic test
 - •Exchange between clinicians and medical testing laboratories
 - •Integration of personal and family health history and genetic/genomic testing results into electronic health records
 - Reporting to authorized clinicians and consumers



Patient – Provider Secure Messaging

- Roles and information flows to support communications of secure information between patients and their providers
 - Secure structured or unstructured patient messages to providers asking health-related questions or providing health information without requiring both parties to be available at the same time
 - Clinician responses to those communications and the ability to initiate communications as necessary to promote patient health
 - Clinician use of reminders within secure messages to support patient health and wellness



Immunizations & Response Management

- Roles and information flows to support routine and emergency immunization
 - Reporting to immunization registries
 - Exchange between registries
 - Patient status queries of immunization registries
 - Integration of immunization schedules into electronic health records or registries
 - Information awareness for location status of immunization supply
 - Apportionment and distribution



Public Health Case Reporting

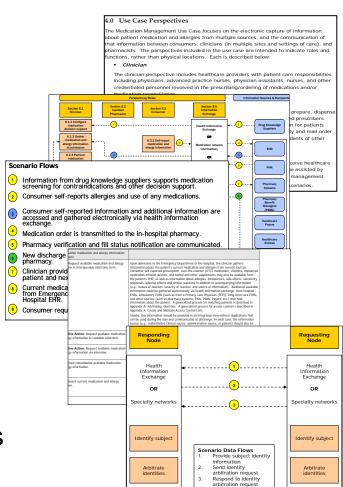
Roles and information flows to support public health reporting, investigation, and information sharing

- Incorporating pre-determined criteria into EHRs and LISs
- Electronic reporting of notifiable conditions/diseases, public health cases, and adverse events
- Exchange of information between clinicians and public health including feedback on submitted reports, focused population health information, or general population health information.

Consultations and Transfers of Care Use Case Review



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Feedback Process



Two ways to Comment:

- 1. ONC Feedback Address or -
- 2. TIGER Comment Form

Located on: TIGER Interop. & Standards WIKI

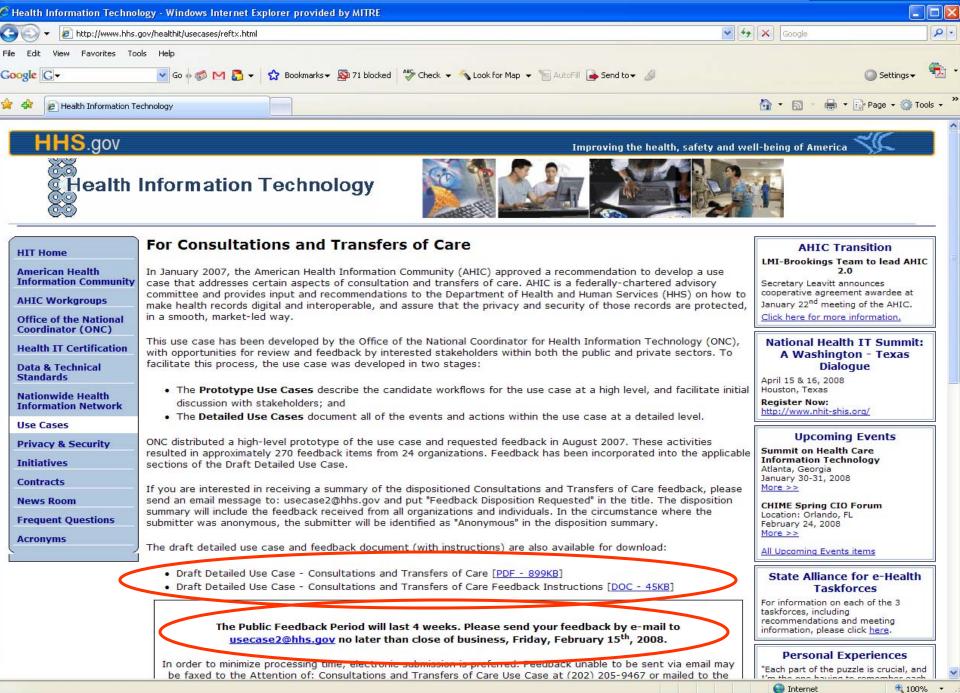
at: http://tigerstandards.pbwiki.com/

Send to: twisdom@himss.org by noon on Feb 14th

If using ONC Feedback Address, please send your feedback no later than close of business, Friday, February 15th, 2008.

Provide Comment today through TIGER





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🚮 start

Feedback Process



Please send your feedback no later than close of business, Friday, February 15th, 2008.

- Consultations & Transfers of Care
 - URL = http://www.hhs.gov/healthit/usecases/reftx.html
 - Feedback address = <u>usecase2@hhs.gov</u>
- Public Health Case Reporting
 - URL = http://www.hhs.gov/healthit/usecases/phcr.html
 - Feedback address = <u>usecase1@hhs.gov</u>
- Personalized Healthcare
 - URL = http://www.hhs.gov/healthit/usecases/phc.html
 - Feedback address = <u>usecase3@hhs.gov</u>



Feedback Process



Please send your feedback no later than close of business, Friday, February 15th, 2008.

- Immunizations & Response Management
 - URL = http://www.hhs.gov/healthit/usecases/respmgmt.html
 - Feedback address = <u>usecase4@hhs.gov</u>
- Remote Monitoring
 - URL = http://www.hhs.gov/healthit/usecases/remon.html
 - Feedback address = <u>usecase5@hhs.gov</u>
- Patient Provider Secure Messaging
 - URL = http://www.hhs.gov/healthit/usecases/remcon.html
 - Feedback address = <u>usecase6@hhs.gov</u>



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TIGER Standards and Interoperability Collaborative Team Communication



- Website <u>www.tigersummit.com/standards</u>
- WIKI http://tigerstandards.pbwiki.com
- Email <u>standards@tigersummit.com</u>
- Email facilitators:
 - Joyce@tigersummit.com
 - Beth@tigersummit.com