CONSUMER PERSPECTIVE

Consumer Empowerment	Chronic Care	Biosurveillance
Near Term Lab results as needed by patient List of conditions & allergies • Health problems • Medication allergies • Allergies Administrative features • Appointment scheduling • Demographic profile • Editing account profile • Insurance eligibility & claims • Financial recordkeeping & management • Privacy & access control Reminders (examples) • Annual check-ups • Cancer screening—mammograms • Cancer screening—colonoscopies • Immunizations *Mid-Longer Term* Online consultation • Structured email Summaries of healthcare encounters • Dates of services • Diagnosis codes • Procedure codes Educational information • Evidence based health information Decision support • Shared decision making • Communications preferences Patient health outcomes • Adverse events • Medical errors • Patient reported health outcomes *Workgroup Issues* PHR not integrated with workflow Limited pre-populated clinical data & limited patient access Minimal interoperability or portability Connectivity between physician offices, PHRs, & pharmacies State laws regarding labs Policies for consumer entered data Quality of pre-populated data	*Near Term* Secure messaging • Online consultation Vital signs • Weight Glucose monitoring Spirometery *Mid-Longer Term* Anticoagulation Vital signs • Blood Pressure • Heart rate and rhythm • Pulse oximetry Fall/motion monitoring Monitoring of medications *Other* Vital signs (general) Labs and pharmacy Lesion assessment Remote monitoring for chronic conditions *Workgroup Issues* HIT use in specific populations Limited interoperability Product and services certification Medico-legal liability risks associated with remote care • State licensure constraints Need for confidentiality, privacy and security Patient identification for authorization and authentication	Case reporting • Lab results • Clinical symptomology • Integration with EHRs • Health alerting (HA)/email alerts Bi-directional communication • Collaborative discussions • Web pages • Interoperable minimum data set Response management • Vaccine • Chemoprophylaxis • Treatment • Isolation/quarantine • Resource identification o Hospital beds o Medications o Medical personnel • EHR data o Immunization registry o Disease registry Adverse event reporting • Devices, drugs, biologic Nosocomial infections • Medication errors o Ordering/prescribing/dispensing o Drug-drug, drug-allergy interaction decision support o Linkage to FDA structured product labeling database results *Workgroup Issues* Lack of EHR case reporting, adverse events, and electronic lab reporting (ELR) integration Storage, retrieval, and management concerns of large amounts of data Lack of central dissemination process for public health HIT standards Lack of interoperable bi-directional communication Public health information network (PHIN) can be leveraged Lack of EHR decision support to prompt • Immunization reminder • Prevention guidelines Need to integrate commercial sector supply chain and national stockpile Privacy/ Security Concerns National notifiable disease conditions have been identified

CONSUMER PERSPECTIVE (continued)

EHR	Quality	AHIC
Patient identification Pharmacy/allergy • Patient recorder use of pharmacological Lab results Problem lists Clinical/encounter notes Anatomic pathology results Vital signs Radiology reports Immunizations *Workgroup Issues* Limited interoperability Pharmacy/ medication interoperability Machine readable and interoperable • Encounter notes • Radiology reports • Lab results CLIA and state policies and guidance for secondary data uses Need for confidentiality, privacy and security Accurate and reliable patient identification needed	*Near Term* Inpatient quality measures (core set) • Labs • Diagnostic procedures • Medications • Vaccines • Treatment Ambulatory measures (core set) • Labs • Diagnostic procedures • Medications • Vaccines • Patient education Clinicians have access to feedback (self-assessment) • Clinical decision support Public reporting • Data aggregation *Mid-Longer Term* Clinical decision support Expanded inpatient quality measures Expanded ambulatory quality measures *Workgroup Issues* Lack of data and technical standards and clinical documentation Data sharing rights and responsibilities Data security and privacy—policies for secondary uses	*Cross- Cutting Themes* Labs, medications, allergies, immunizations Securing messaging/on-line consultation Bi-directional communications Adverse event reporting Case reporting Clinical decision support systems Identification/authentication Problem lists Clinical encounter notes Family history/social factors Vitals signs Population health/conditions Minimum data set Confidentiality, privacy & security of patient data Data access / Data control Data aggregation Infrastructure areas missing • Security, Network, Repositories *Missing Areas* *Consumer Empowerment* Vital measurements Text documents Provider list Health literacy (multilingual support) Reminders Advance directive/living wills Social/family history PHR portability methods Medication history E-prescribing *Chronic care* Standardization of device interfaces Care plans/clinical flowsheets Provider list *Biosurveillance* Adverse events / Nosocomial infections Clinical data storage for surveillance Case reporting Bi-directional communications *EHR* Lab results Anatomic pathology results Radiology reports Social history Procedure reports Medications Referrals *Population Health* Dental *Workgroup Issues* Workflow integration Int'l public health collaboration Legal liability & regulatory barriers Consumer consent

CONSUMER PERSPECTIVE (continued)

CCHIT

Patient safety

Transfer of care

- Transmission of patient data (problems, allergies, med list, etc) across providers and settings
- Ambulatory and emergency referrals, discharge summaries, etc.

Medication management

- Outpatient prescription writing and transmission to pharmacies
- Ordering
- Clinical decision support
- Transmission
- Dispensing
- Administering
- Reconciliation

HITSP

EHR/clinical record

- Primary data source standards
  - Problem lists
  - Meds
  - Allergies
  - Text reports
  - Numeric results
  - Labs/micro
  - Images
- HIPAA covered entities
  - X12 Claims attachment

Secondary uses of data

- Clinical research
- Clinical trials
- Population health

Quality/control measurements

- Consistency across uses

Clinical device data

- Glucometers
- Monitors
- Smart pump

Cross use case work on security (standards)

- Vocabulary for role-based access control
- Audit logging and exchange
- Authentication models to support chain of trust data exchanges

PROVIDER PERSPECTIVE

Consumer Empowerment	Chronic Care	Biosurveillance
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SECONDARY USE PERSPECTIVE

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