



Department of Health & Human Services
Office of the National Coordinator for
Health Information Technology

HEALTH INFORMATION TECHNOLOGY
NATIONWIDE HEALTH INFORMATION NETWORK

Nationwide Health Information Network Health Information Exchange (NHIE) Services

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June 21, 2007



The Nationwide Health Information Network

NHIN Working Assumptions

- a 'network of networks'
- securely connects consumers, providers and others who have or use health-related data
- no national data store or centralized systems at the national level
- no national patient identifier
- shared architecture (standards, services, and requirements), processes and procedures

The Nationwide Health Information Network

- **Health Information Exchange (HIE)** - An entity that enables the movement of health related data among entities within a state, a region or a non-jurisdictional participant group
- **NHIN Health Information Exchange (NHIE)** – An HIE that implements the NHIN architecture, processes and procedures and participates in the NHIN Cooperative
- **Health Information Service Provider (HSP)** – A company or other organization that supports one or more Health Information Exchanges by providing them with operational and technical health exchange services

The Nationwide Health Information Network

Products of 2006 – are guidance for 2007 trial implementations:

- Seven AHIC use cases
- HITSP standards
- NHIN functional requirements (with NCVHS)
- NHIN privacy and security recommendations (NCVHS)
- Public input from forums
- CPS privacy and security work
- Prototype architectures
- Core services and capabilities for an NHIE
- Report on service interfaces

NHIE Core Services – Data Services

- Secure data delivery, and confirmation of delivery, to EHRs, PHRs, other systems and networks
- Data look-up, retrieval and data location registries
- Support for notification of the availability of new or updated data
- Subject – data matching capabilities
- Summary patient record exchange
- Data integrity and non-repudiation checking
- Audit logging and error handling for data access and exchange
- Support for secondary use of clinical data including data provisioning and distribution of data transmission parameters
- Data anonymization and re-identification as well as HIPAA de-identification

NHIE Core Services – User and Subject Identity Management Services

- User identity proofing, and/or attestation of third party identity proofing for those connected through that HIE
- User authentication, and/or attestation of third party authentication for those connected through that HIE
- Subject and user identity arbitration with like identities from other HIEs
- Management of user credentialing information (including medical credentials as needed to inform network roles)
- Support of a HIE-level, non-redundant methodology for managed identities

NHIE Core Services – Management Services

- Management of available capabilities and services information for connected user organizations and other HIEs
- HIE system security including perimeter protection, system management and timely cross-HIE issue resolution
- Temporary and permanent de-authorization of direct and third party users when necessary
- Emergency access capabilities to support appropriate individual and population emergency access needs

NHIE Core Services – Consumer Services

- Management of consumer identified locations for storage of their personal health records
- Support of consumer information location requests and data routing to consumer identified personal health records
- Management of consumer-controlled providers of care and access permissions information
- Management of consumer choices to not participate in network services
- Consumer access to access logging and disclosure information for PHR and HIE data
- Routing of consumer requests for data corrections

