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# NCVHS Hearing on Functional Requirements for the NHIN

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This presentation discusses a NHIN Architecture Prototype project made possible by a contract from the Office of the National Coordinator for Health Information Technology (ONC), DHHS. The content is solely the responsibility of the authors and does not necessarily represent the official view of ONC.



## Minimum but Essential

- Unique identification of Patients and their associated information
- Robust Record Location Services
- Infrastructure to Support Data Exchange
- Robust Privacy and Security Framework
- Ability to Anonymize and Deanononymize data
- The ability to set standards to enable computable data exchange

## “Minimal but Essential” for linking to the Network



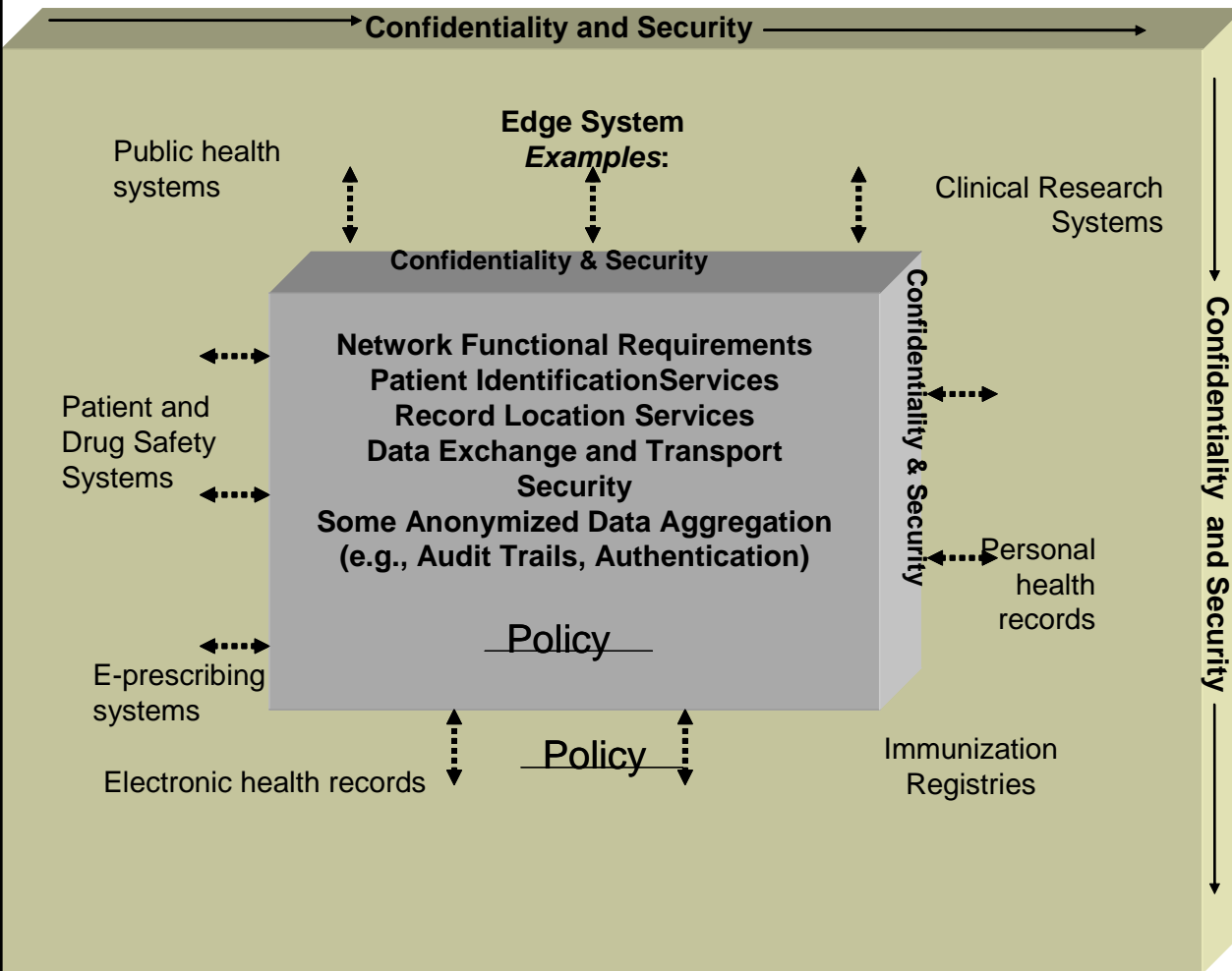
- Setting guidelines, policies and protocols for Authentication, Authorization, Credentialing, Data Access and other essential functions
- Processes for Anonymizing and deanonymizing data
- Setting terminology and messaging standards
- Processes and protocols for edge and core system interactions around record locator services and data access

# Core versus Edge



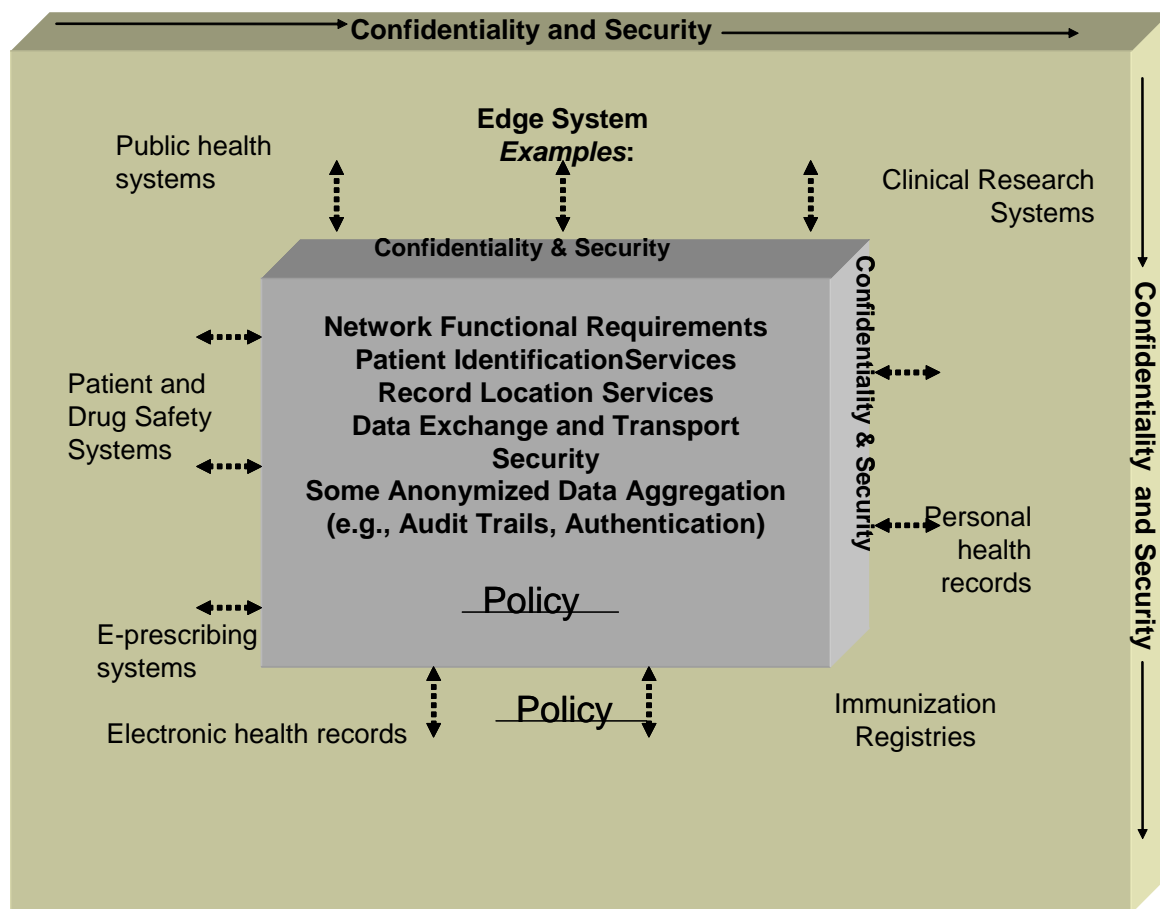
- We live in a world of shades of grey
- Many functions will live in both
- The NHIN Core must define the processes and standards by which edge systems interact with the NHIN to use its functions
- Patient identification services, Record location services, data exchange capabilities, national aggregation of anonymized data will be driven largely out of the core
- Much of the business logic for many (most) services will reside in the edge systems
- The policies, standards, and processes for how this all works together will be defined by the Core functions and their interfaces with the edge systems

# Example One – Patient Accessing Data from Distant ER



- Audit and logging (Both)
- Authentication (Both)
- Authorization (Both)
- Confidentiality (Both)
- Credentialing (Edge)
- Data access and update (Both)
- Data content (Edge)
- Data filtering (Edge)
- Data mapping/translation (Edge)
- Data quality/data integrity (Edge)
- Data rendering (Both)
- Data retrieval (pull) (Both)
- Data routing (Core)
- Data source (Edge)
- Data transmission (push) (Both)
- Data usage (Edge)
- Identity/information correlation (Both)
- Persistent data storage
  - Primarily Edge for PHI
- Record location (Both)

# Example Two – Clinical Research or Public Health Official Performing Population Based Research



- Audit and logging (Both)
- Authentication (Both)
- Authorization (Both)
- Confidentiality (Both)
- Credentialing (Edge)
- Data access and update (Both)
- Data content (Edge)
- Data filtering (Edge)
- Data mapping/translation (Edge)
- Data quality/data integrity (Edge)
- Data rendering (Both)
- Data retrieval (pull) (Both)
- Data routing (Core)
- Data source (Both)
- Data transmission (push) (Both)
- Data usage (Both)
- Identity/information correlation (Both)
- Persistent data storage
  - Primarily Edge for PHI
- Record location (Both)