

# The Digital Identity Frontier in Healthcare



# National Health Information Network “NHIN”

- History
- How will it work?
- Benefits
- Challenges





# The NHIN

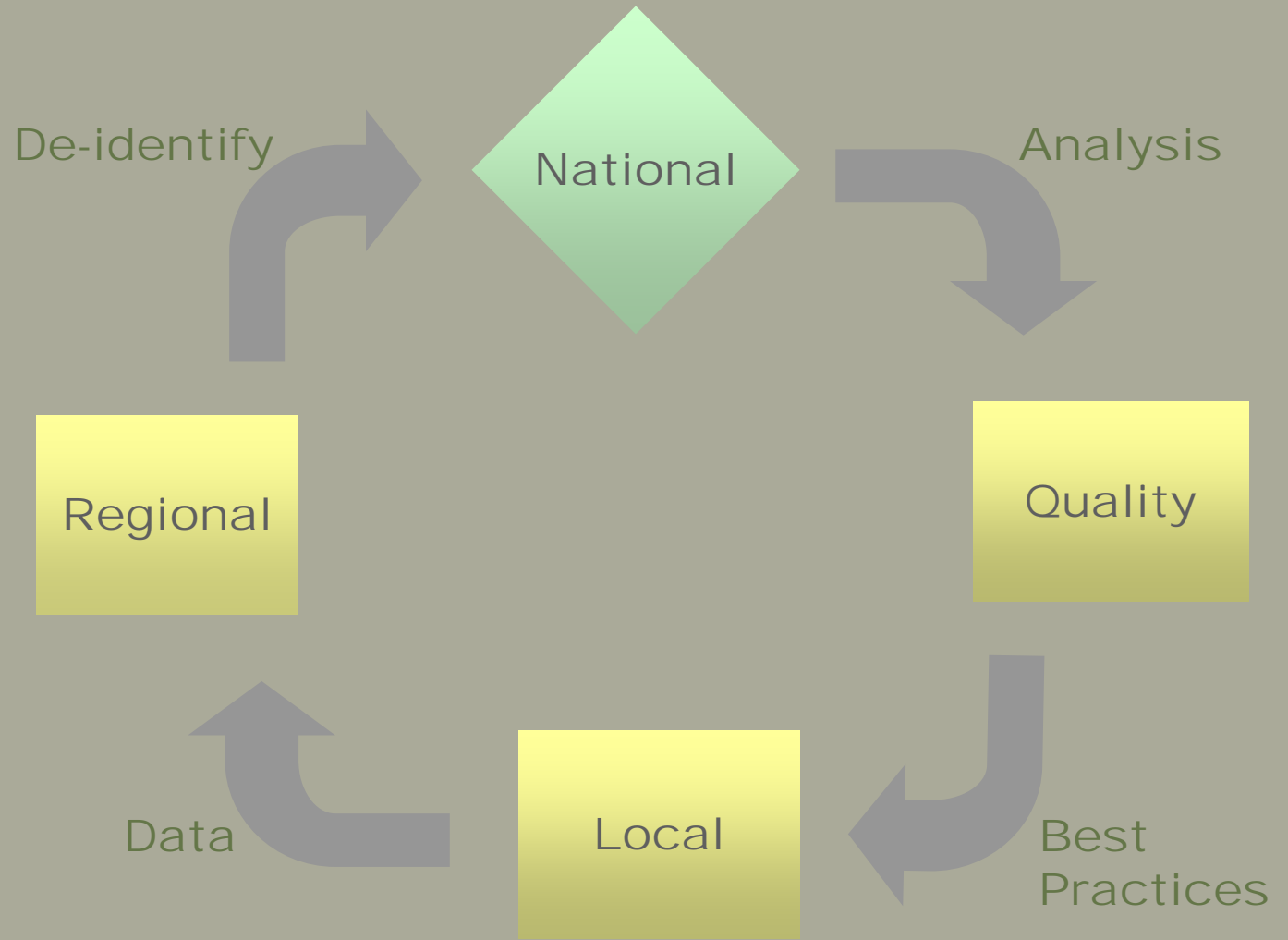
- *To Err is Human*  
1999 Institute of Medicine report
- Health IT Strategic Framework
  - Office of the National Coordinator
  - Prototypes in development
    - Accenture
    - CSC
    - IBM
    - Northrup Grumman
- RHIOs → NHIN





# The NHIN - Benefits

- **Local and regional**
  - Individual
  - Community
- **National**
  - Biosurveillance / event detection
  - Public health
  - Quality data
  - Best practices, evidence-based medicine





# The NHIN - Challenges

- Interoperability
  - 2000+ healthcare standards
  - Exchange data, not documents
- Funding
- Identification



# Patient Identification

- Hospital level:  
Master Patient Index (MPI)
- National level:  
Unique patient identifier?



# Legislative History - Unique Patient Identifier

- Aug 1996: HIPAA, adopt standard unique identifier for patients
- Feb 1998: NCVHS recommends Secretary delay implementation
- Jul 20 '98: 1<sup>st</sup> NCVHS regional public meeting
  - » Further hearings cancelled
  - » HHS NOI publication cancelled
- Jul 30 '98: Clinton blocks implementation until further privacy protection enacted
- Oct 1998: Congressional hold on HIPAAA provision in FY1999 HHS budget
- 2000-pres: Hold renewed annually



# Methods - Algorithmic Matching

- Algorithms match patient demographic data
  - **Name:** John R. Smith
  - **Gender:** M
  - **DOB:** 04/23/41
  - **Address:** 1620 W. Belmont St. Chicago, IL
- False positives
- Local control: national queries fed through data locators

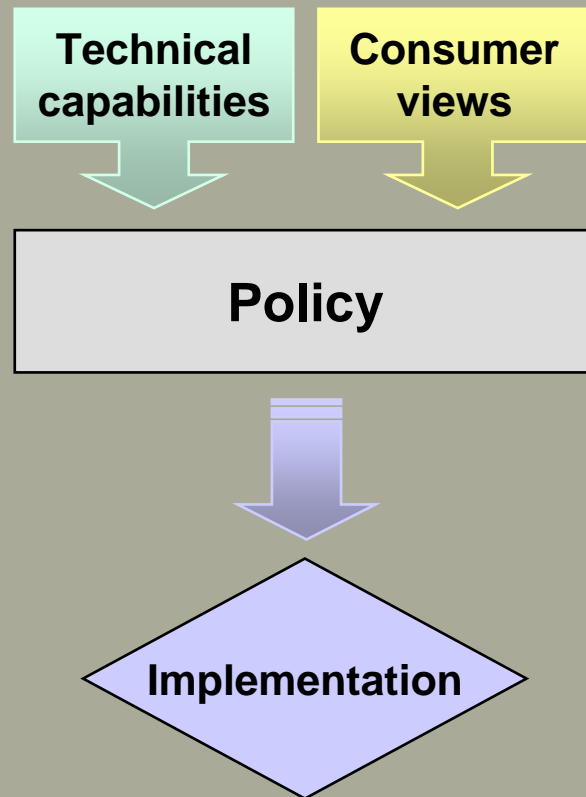


# Identification - Concerns

Discussed Concerns for Methods of Matching Patients with Records	
Unique Identifier	Algorithmic Matching
Must be guaranteed unique; "Shared Secret" problem	False Positives
Poor quality of data in hospital MPIs	Poor quality of data in hospital MPIs
Identity theft/data breach using unique identifier	Identity theft/data breach using demographic matching information
Backporting new identifier to vast number of existing records	Scalability to national population



# Alliance Next Steps





# Cultural Challenges

- Understanding of HIT
  - Isn't it already happening?
- Understanding the current state
  - “A Day in the Life of a Medical Record”
- Healthcare is unique
  - Employment consequences
  - Insurance coverage
  - Social stigma



# Policy Considerations

- Articulate vision for role of NHIN in transformation of healthcare
- Re-open discussion on UPI options
  - Remove Congressional hold
  - Move ownership from gov. to healthcare
- Other industries
- Data aggregation issues
  - How to de-identify data for research
  - Prevent duplication



# Questions?

Contact:

**Rod Piechowski**  
[rpiechowski@nahit.org](mailto:rpiechowski@nahit.org)

**Laura Wooster**  
[lwooster@nahit.org](mailto:lwooster@nahit.org)

