



***NORTHROP GRUMMAN***

# **Nationwide Health Information Network Use of HL7 Standards – The Northrop Grumman approach**

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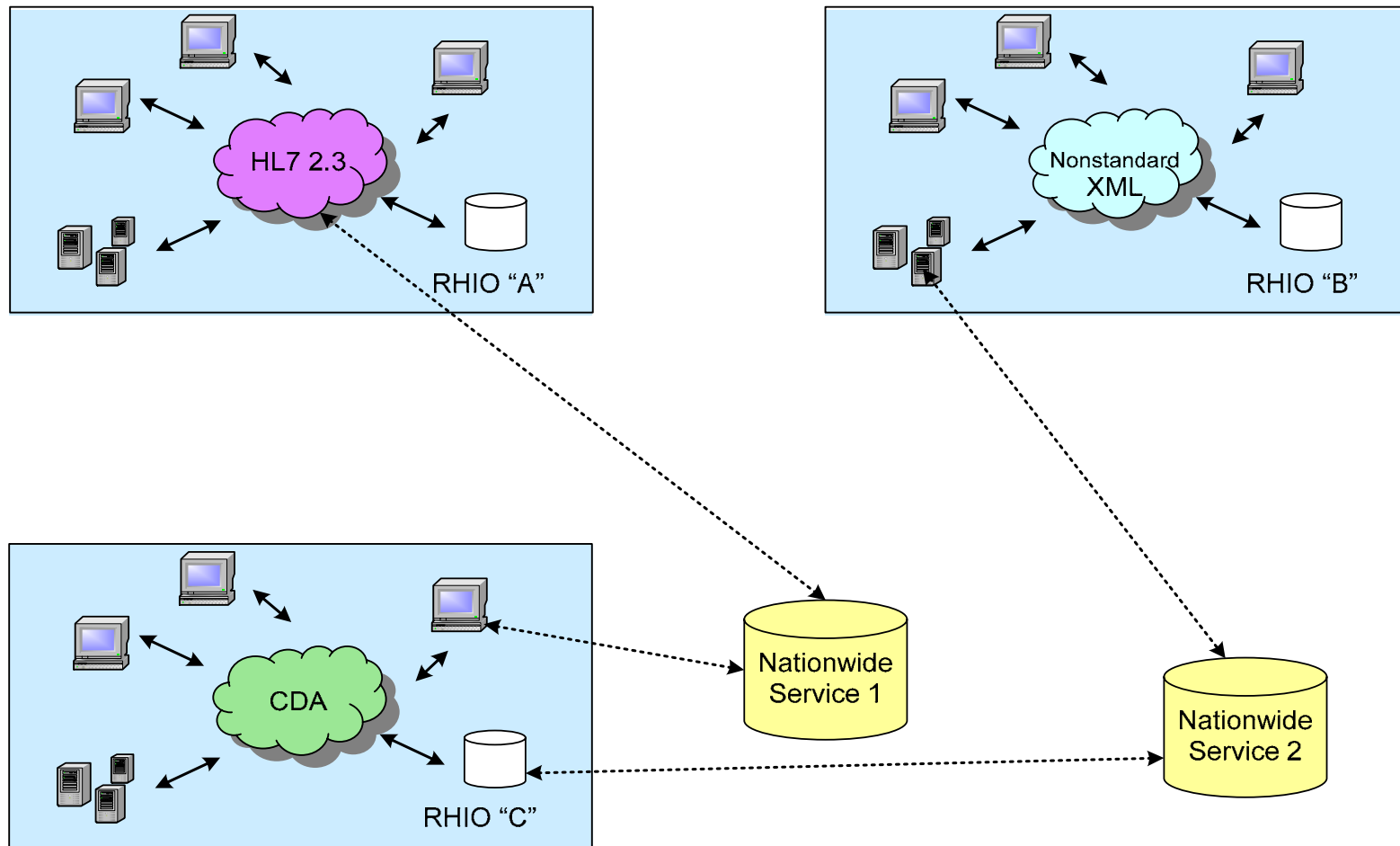
**DEFINING THE FUTURE**

*This presentation discusses an 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.*

**HEALTH**

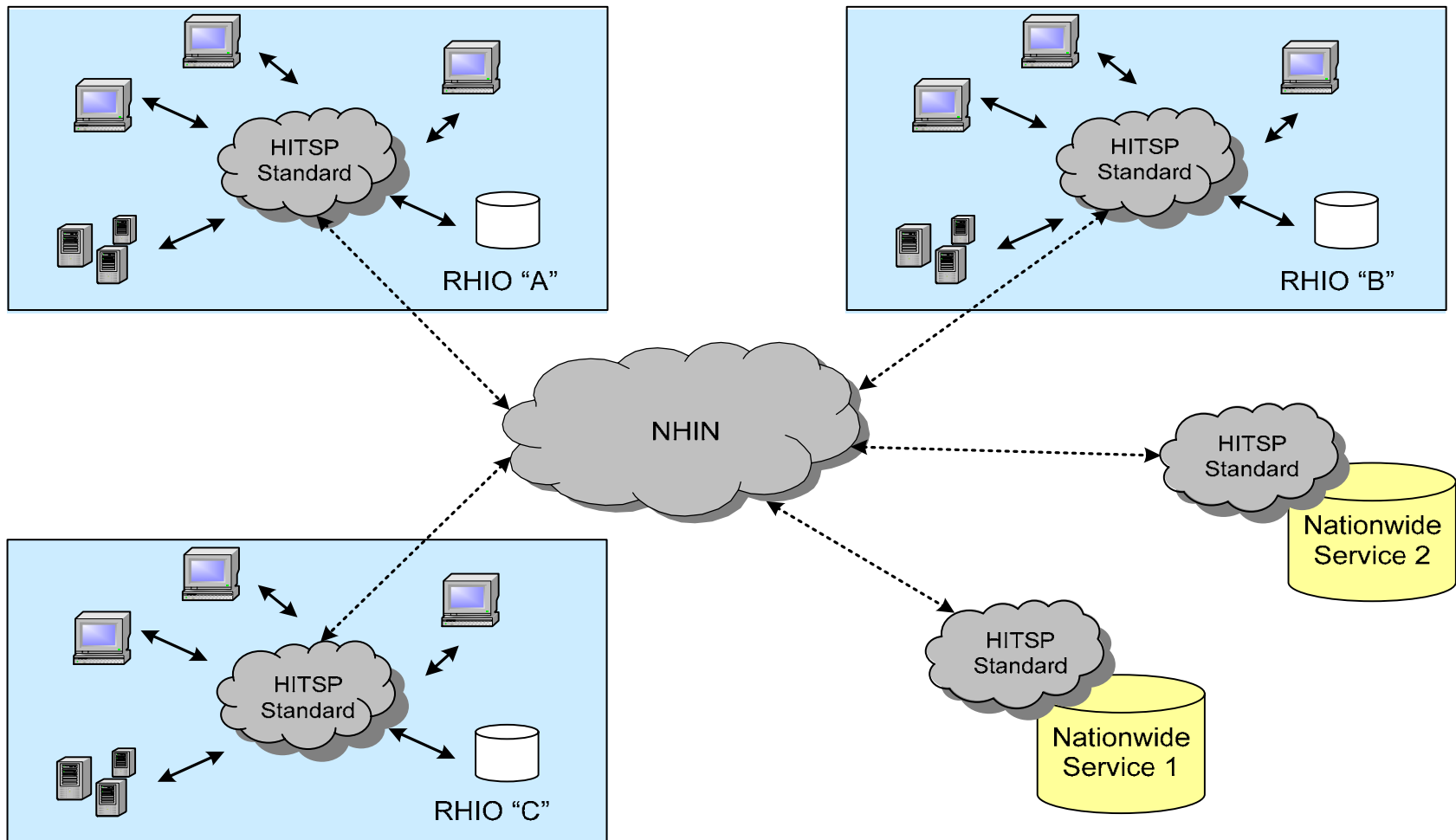


# Current state of interoperability in the U.S.



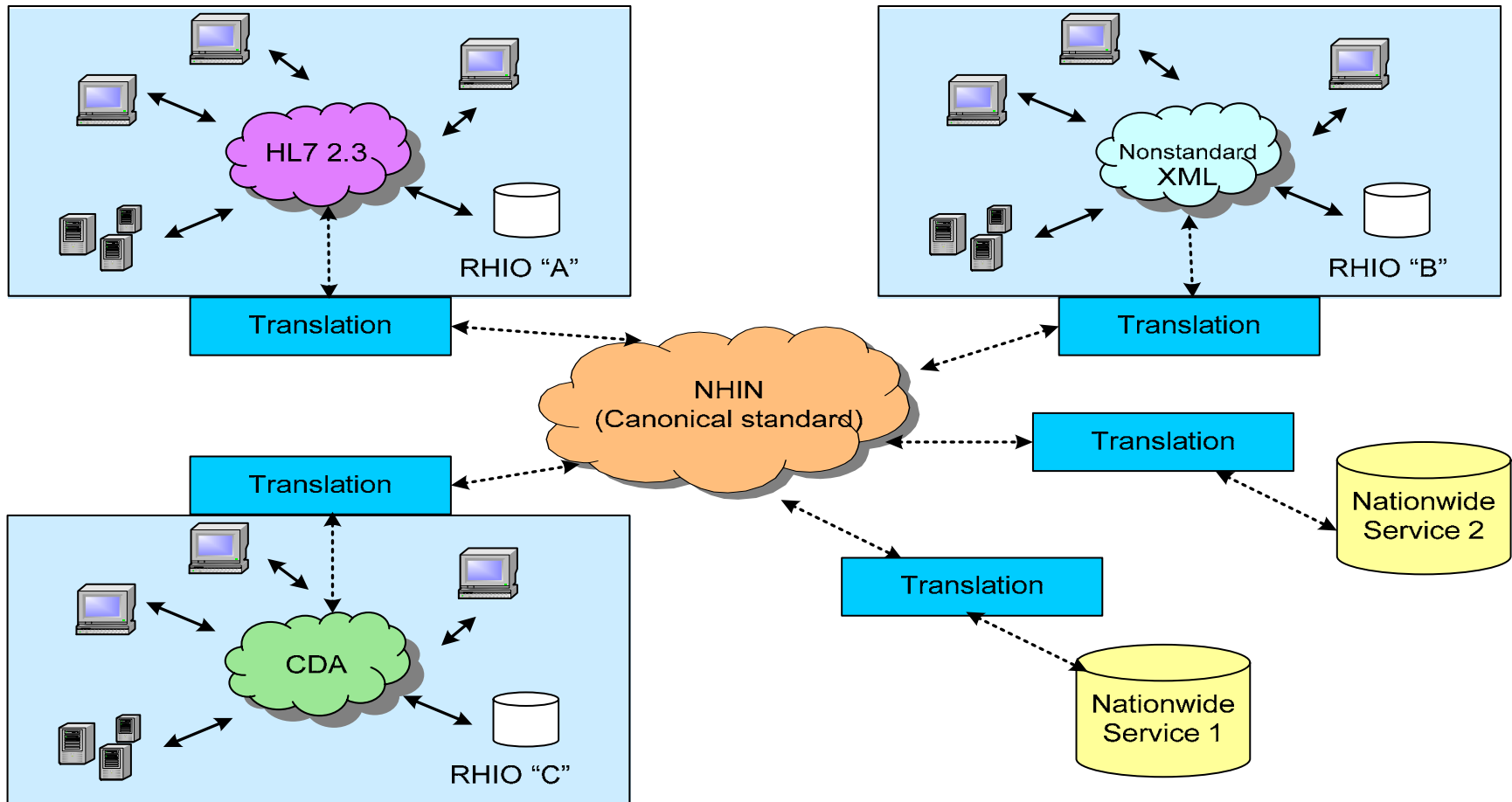


## One way to create an NHIN...





# Alternative approach





## Desired features of an NHIN canonical standard

- Enables computable semantic interoperability
- Enables interoperability across domains
- Is based on an overarching information model

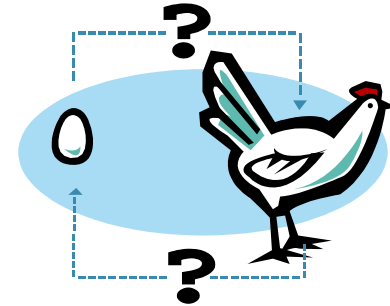


Answer: HL7 Version 3



## Main challenge to HL7 V3 as NHIN standard

- Not enough adoption
  - But implementers won't start adopting if other standards are selected instead
- However, the canonical data model lets us select a standard based on its future potential, not its current adoption
  - Current local interoperability implementations will still work without change
  - Eventually, people will migrate to the canonical standard
  - No need to rip and replace





## Northrop Grumman's use of HL7 v3 for NHIN

- **Patient identification:**
  - Patient Registry Find Candidates Query/Response (PRPA)
- **Metadata registry:**
  - Find Act Reference Registry Entries Query/Response (MFMT)
- **Consent registry:**
  - (Interim) Masking Topic (MFMT)
  - (Future) Medical Records Data Consent Topic (RCMR)
- **Personal Health Record:**
  - CDA (awaiting CCD specs)
- **Medication History:**
  - Pharmacy Generic Patient-Related Query (PORX)
- **Laboratory Results:**
  - Laboratory Result Topic (POLB)



## A topic for further HL7 committee work:

- Report of resource utilization for biosurveillance (e.g. number of beds available in hospitals)
- No current HL7 v3 RMIM for this use case
- Current standard: HAVE (Hospital Availability Exchange)
- Standard includes its own XML-encoding schema and wrapper (EDXL-DE)





## Contact Information

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