# State of the Union for Clinical Interoperability

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# Eyes on the Stars; Feet on the Ground

# Models for Large-Scale Multiparty Interoperability

- A few dominant players, many subordinate players
- Paid intermediaries
- Standards level the playing field

# Interop Requires

| Among Two Parties |
| --- |
| A “business” relationship |
| A policy umbrella |
| A trust agreement |
| Willingness to modify systems and workflows |
| “Good-enough” standards |
| (Usually) bi-lateral adaptation |
| Committed operational resources |
| Systematic evolution |
| Implementable technology |
| ♚ Ergo: A strong mutual incentive – usually (always?) economic |

# Interop Requires

| Among Two Parties | Large-scale Multiparty |
|---|---|
| A “business” relationship | Stereotyped |
| A policy umbrella | Jurisdictional variation |
| A trust agreement | Manifested through technology |
| Willingness to modify systems and workflows | (To the stereotype) |
| “Good-enough” standards | Certified implementation |
| (Usually) bi-lateral adaptation | Minimal |
| Committed operational resources | You betcha! |
| Systematic evolution | Asynchronous bilateral upgrade |
| Implementable technology | High-productivity technology |
| ♚ Ergo: A strong mutual incentive – usually (always?) economic | (To the stereotype) |

# How Are We Doing in the US?

- A “business” relationship
  - Mostly local; locales may extend based on population
  - Best interop occurs among dominant healthcare delivery organizations
- Policy umbrella/Trust agreement
  - Good for push; disappointing cost
  - Improving for pull

- Willingness to modify systems/workflows
  - Huge improvement in awareness
  - Many hurdles remain around clinical data

# How Are We Doing in the US? (2)

- Agreed-upon standards/Minimal bilateral adaptation
  - Progress primarily through meaningful use
  - Virtually no success sharing structured data with or without an intermediary through Stage 2
    - (lab?)
    - ePrescribing – dominant intermediary
- Committed operational resources (see economic incentive)
- Systematic Evolution
  - Awareness developing with Stage 3
  - Bilateral asynchronous cutover discussions going on now

# How Are We Doing in the US? (3)

- Economic Incentives
  - Meaningful use an artificial but useful incentive
  - Population-based payment may create real economic incentive
    - Variable by locale
    - Incentive to interoperate or consolidate?
    - Near term approach: define your strategy based on limited interoperability

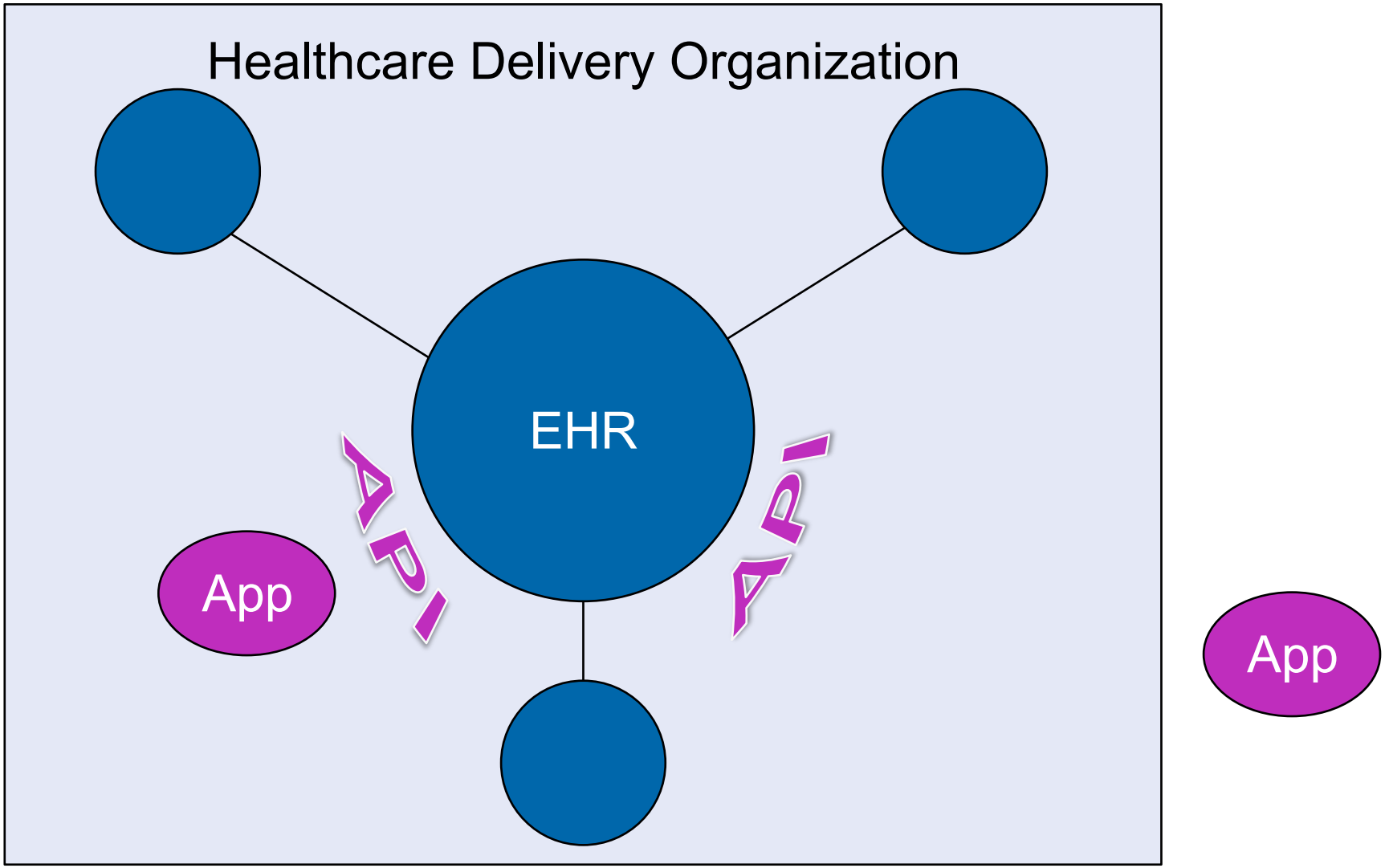
# Feet on the Ground:
# Limitations of Meaningful Use

- US Gov. vs patient ID
- Congressional misfire re HIE
- Mandatory compliance implies small bites
- Federal government internal
- Failed/unproven CDA-based structured data
  - C32 a bust
  - Revised regulatory approach in Stage 2 more focused
  - C-CDA unproven, therefore a regulatory gamble

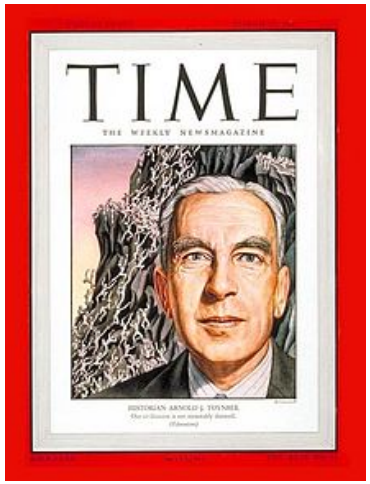
# Eyes on the Stars: Secondary Usage

- "Population health: paid intermediaries providing progress today in population-based locales
- JASON report: http://healthit.gov/sites/default/files/ptp13-700hhs_white.pdf
  - Systemic look at a pull-based architecture
  - Ink-blot test; emblem is the "JASON architecture"
  - Hopefully helps to shape future thinking
- EHR-related applications
  - Based on HL7 Fast Healthcare Interoperability Resources – FHIR
  - Healthcare Services Platform Consortium (HSPC) http://healthcaresoa.org/
  - SMART on FHIR http://smartplatforms.org/smart-on-fhir/

# Eyes on the Stars API Phoenix



# My Goal: To see *some* large-scale, multi-lateral, productive interop before I leave the healthcare system.




Arnold Toynbee

It is a paradoxical but profoundly true and important principle of life that the most likely way to reach a goal is to be aiming not at that goal itself but at some more ambitious goal beyond it.

Read more at http://www.brainyquote.com/quotes/authors/a/arnold_j_toynbee.html#cwomcLxkmMcbg18k.99

George Lukas

I didn't begin to get Star Wars right until Return of the Jedi. (paraphrased)