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# **INTEROPERABILITY WILL NOT WORK...**

**...if we can only accurately match patients to  
their records 95% of the time**

April 13, 2015

## GP11 Team

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- 520-342-8457 (mobile)
- Physician with 42 years' experience in medical informatics.
- Washington University, Digital Equipment Corporation, First Data Corporation, Sunquest, Gartner, ASTM



## GPII Team

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Rob Macmillan, CEO, GPII

- 520-449-9840 or [robmacmillan@msn.com](mailto:robmacmillan@msn.com)
- 28 years experience in healthcare consulting, laboratory systems, cancer therapy, electronic healthcare records
- Elekta Inc., Triple G, Sunquest, Healthvision

# Meeting Objectives

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- Awareness
  - Problem
  - Solution
- Discuss alternative solutions
  - Pro and cons
- Define a plan of action
  - What specifically can move a solution forward?
  - Who needs to be involved?
  - Follow up

## Patient Matching



hfma Do You Know Who's Who in Your EHR?

Beth Just, President, Just Associates  
Karen Proffitt, VP, Just Associates



“Overlay and duplicate records pose a particularly insidious problem today for healthcare organizations”



## **EMPI Patient Matching**

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- Uses available PII
- Outcome is a probability
- Different algorithms
- High error rate
- Labor intensive – costly
- Cannot be perfected without a fundamental change



## EMPI Patient Matching

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- Data is the problem
  - PII changes
  - Data entry errors
  - Similar PII causes “collisions”
- Why not use SSN to identify patients?
- Why not use biometrics?
- ONC / HIMSS have initiated a study

# Deaths / Breaches / Cost



Healthcare IT News



Third leading cause of death

ECRI Institute

Top 10 Patient Safety Concerns

MEDCITY News

Anthem reminds us:  
Patient ID a good idea



PubMed.gov

In 2008, medical errors cost \$19.5 billion

Russ Branzell, CEO, CHIME, “Mad as hell”



# Ensure 100% Accuracy



## NATIONAL PATIENT ID CHALLENGE

the quest for a universal solution

### 📍 The Challenge

Ensure 100% accuracy of every patient's health info to reduce preventable medical errors and eliminate unnecessary hospital costs/resources.

### 📅 Stage

The challenge is in the Pre Registration Stage

### 🏆 Total Prize Amount

\$1,000,000

[★ Follow Challenge](#)



created by  
CHIME



## Privacy / Patient Trust

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First real-world trial of impact of patient-controlled access to electronic medical records  
December 16, 2014



Lucia Savage, CPO, ONC  
**“Patient-centered decision making in electronic health information exchange can inspire trust in health IT”**

## CIOs, You Wish

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**HealthData**  
Management

December 1, 2014

“When we asked HIT execs what’s on their wish list for next year, they shot for the stars:”

- Industry interoperability
- National Patient Identifier

## CIOs, You Wish

**HealthData**  
Management

December 1, 2014



Randy McCleese, CIO St. Claire Regional  
Medical Center, Morehead, KY

“Wishing for interoperability and an NPI is really a single thought, since interoperability can never truly happen without the identifier”



## Introducing *<prTag>*

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- *<prTag>* is a fundamental change that enables EMPI matching to achieve 100% accuracy
- *<prTag>* is a healthcare specific, globally unique data element
- *<prTag>* addresses all problems and challenges mentioned earlier
  - 100% accurate
  - Empowers the patient
  - Replaceable

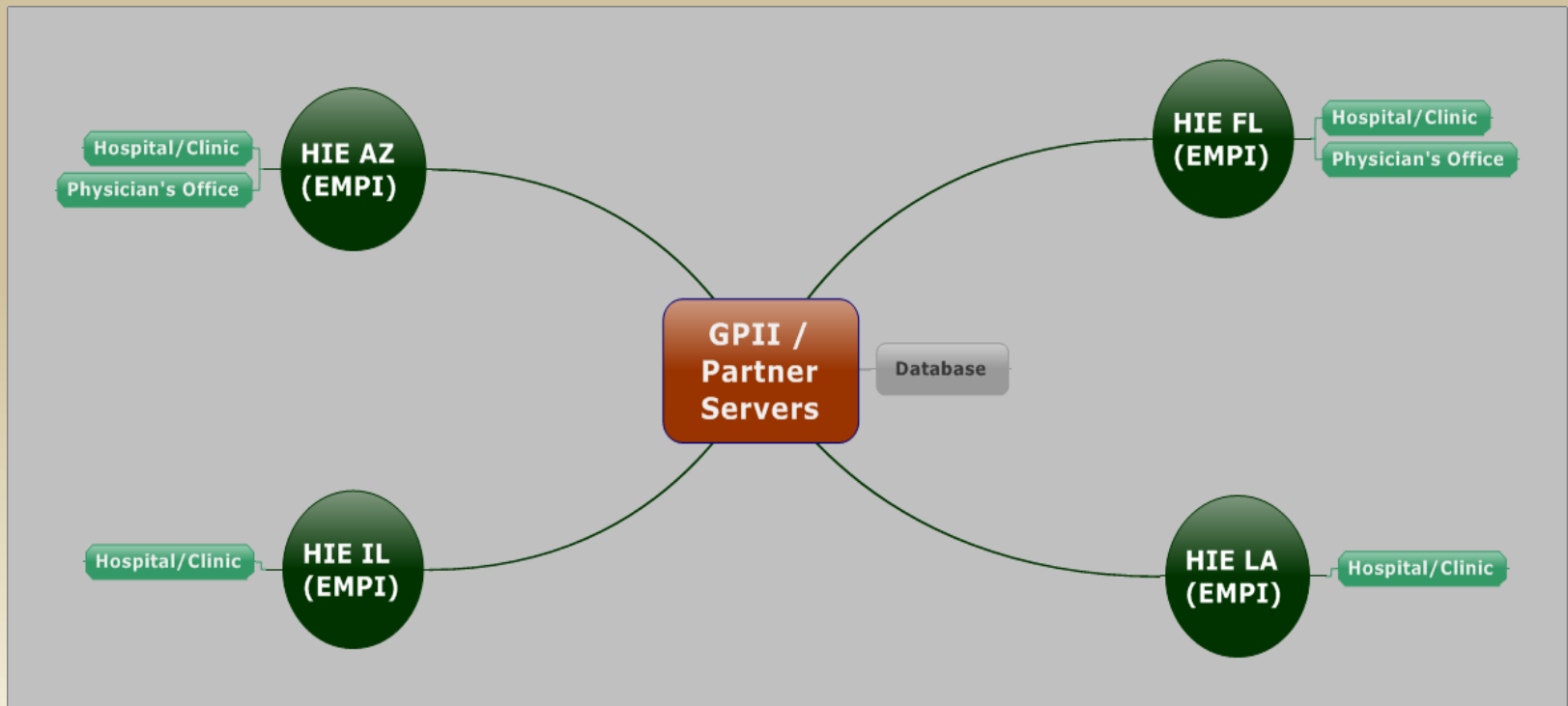


## How *<prTag>* Works

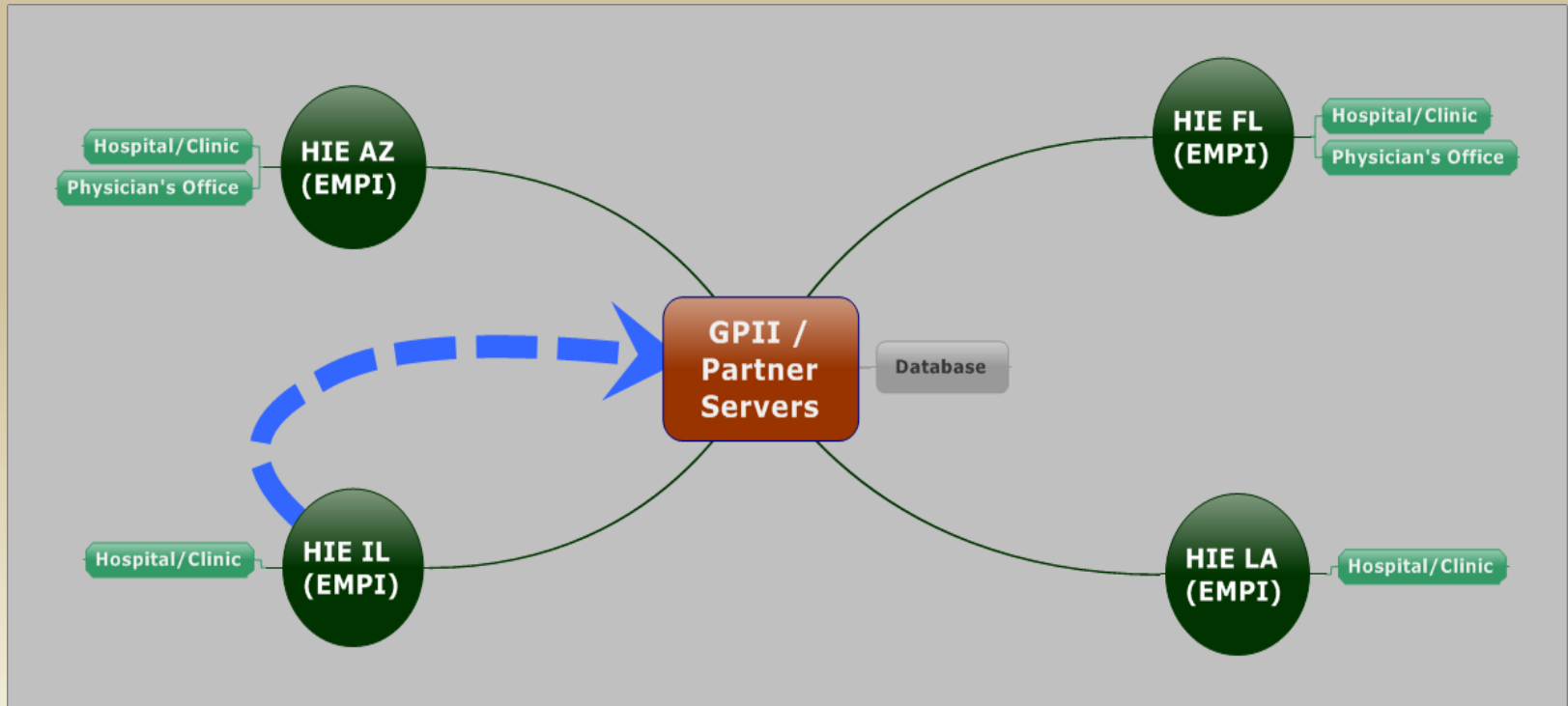
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- Issuance
  - Patient or provider requests a *<prTag>*
  - GPII generates a *<prTag>* anonymously
  - *<prTag>* is stored in patient's EMPI profile
  - Patient is issued a token
- Use
  - EMPI provides the link to facility-specific identifiers
  - GPII sees and stores no PII
  - Patient uses *<prTag>* for encounters across all facilities

# Interoperability

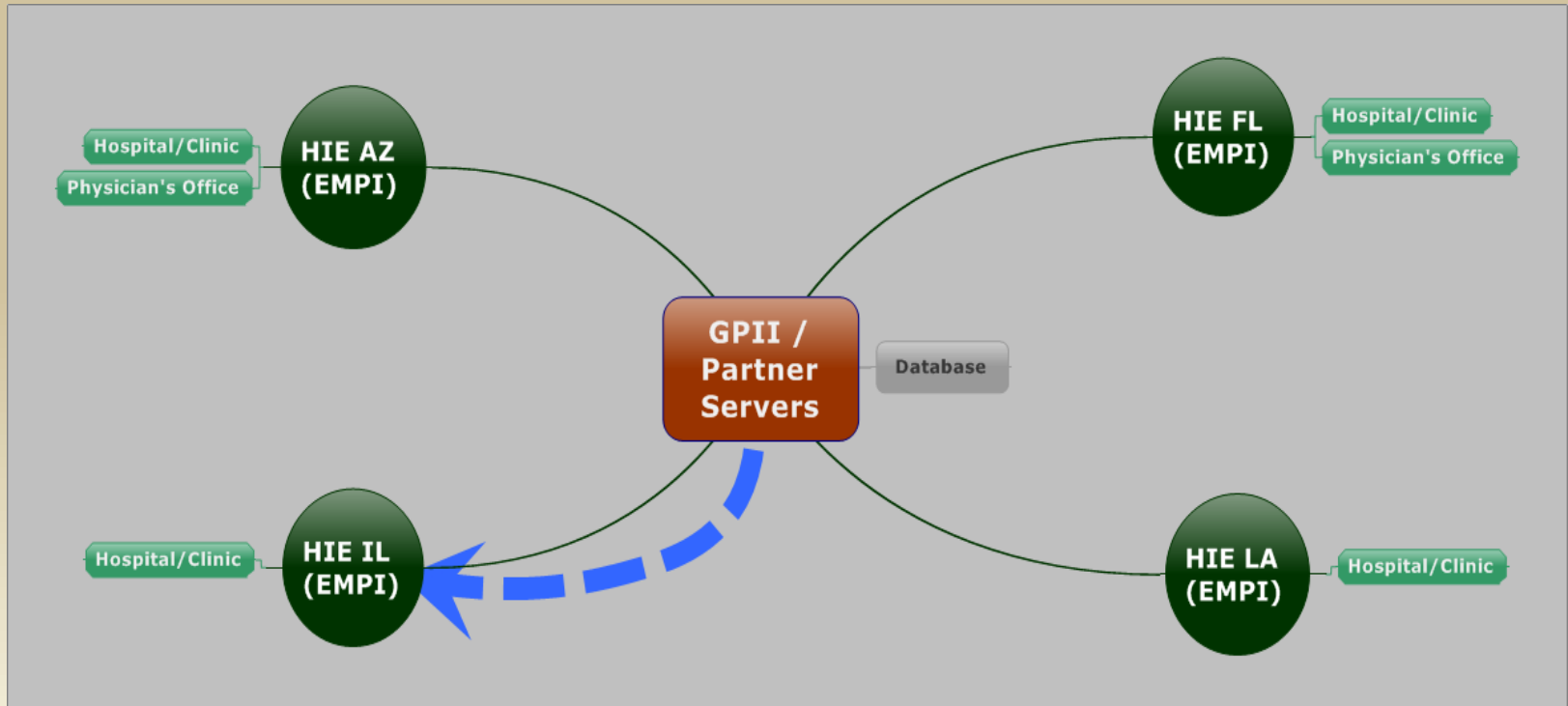


# Interoperability

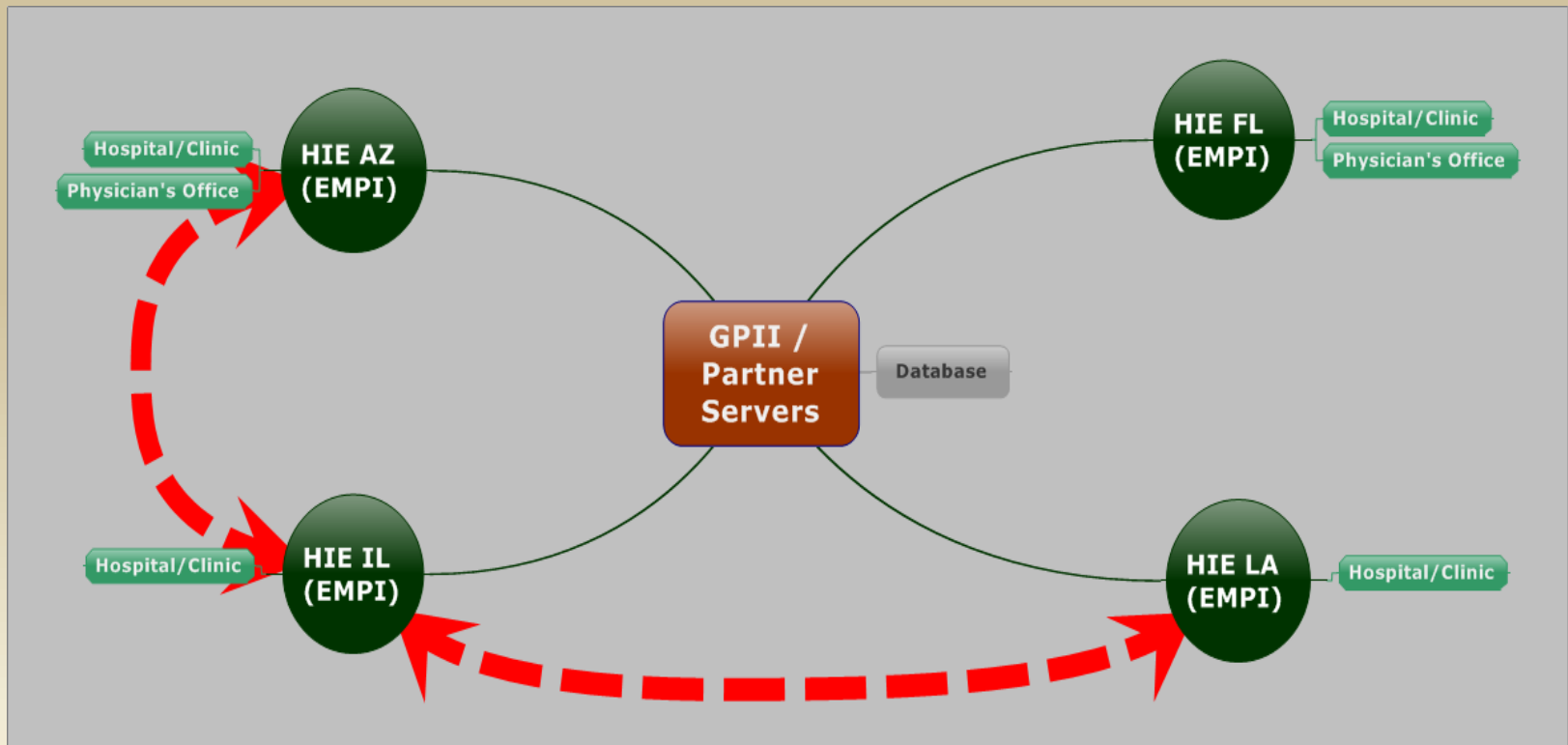




# Interoperability



# Interoperability





# **<prTag> Protects Patient Privacy**

John Q Public



18563823043.27145728

This <prTag> is issued by ABC Healthcare to accurately identify the health record for this individual. Use this <prTag> for each encounter to ensure your open health record is accurately maintained.

*Enter appropriate reminder here*

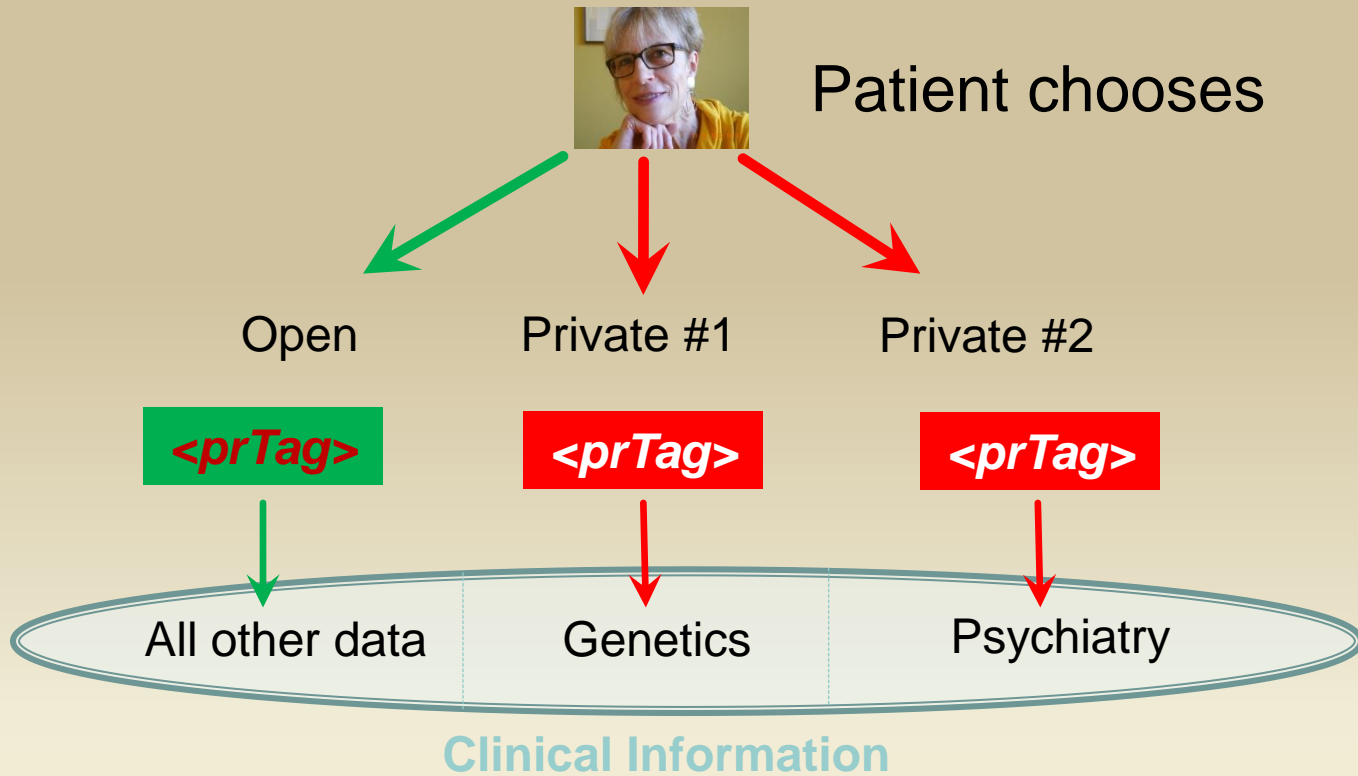


83673447252.1172853407

This <prTag> is issued by ABC Healthcare to accurately identify private health information for this individual. Use this <prTag> for an episode for which you want to control access to your private health information.

- Open <prTag>
- Private <prTag>
- Patient chooses
- Anonymity preserved

# Patient Empowerment



## **<prTag> - Fraud & Identity Theft**

- **<prTags>** are:
  - Counterfeit resistant
  - Anonymous
  - Replaceable
  - Credit card model



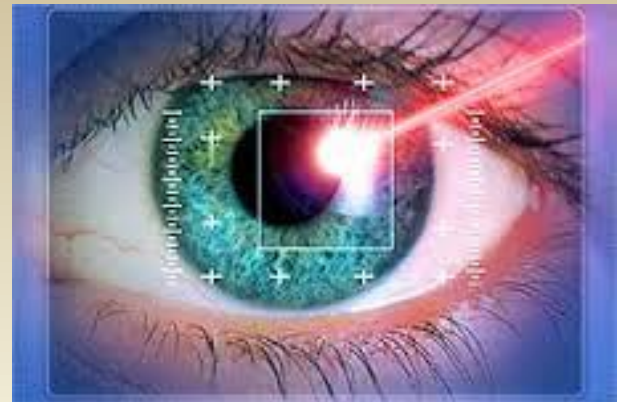
**“Place your <prTag> at risk, not your identity”**

## Why Not Use Biometrics?

- Biometrics are very valuable for authentication
- **<prTags>** and biometrics work well together

### However

- Patient must be present
- Cannot be changed
- Costly
- Privacy?



## Comprehensive 2008 Study

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“Broad adoption of a UPI should enhance the U.S. Health Care System

A Hybrid System ... will be necessary for the foreseeable future

Security and Privacy could be strengthened with a UPI

Costs of a UPI are significant, but probably much less than the value associated with error reduction, efficiency and interconnectivity of the Health Care System”



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# **INTEROPERABILITY WILL WORK...**

**...if we supplement existing EMPI systems  
with *<prTag>* capability**