Smart Card Alliance Government Conference

Secure Patient Identification

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Peter Barry peterbarry@aol.com

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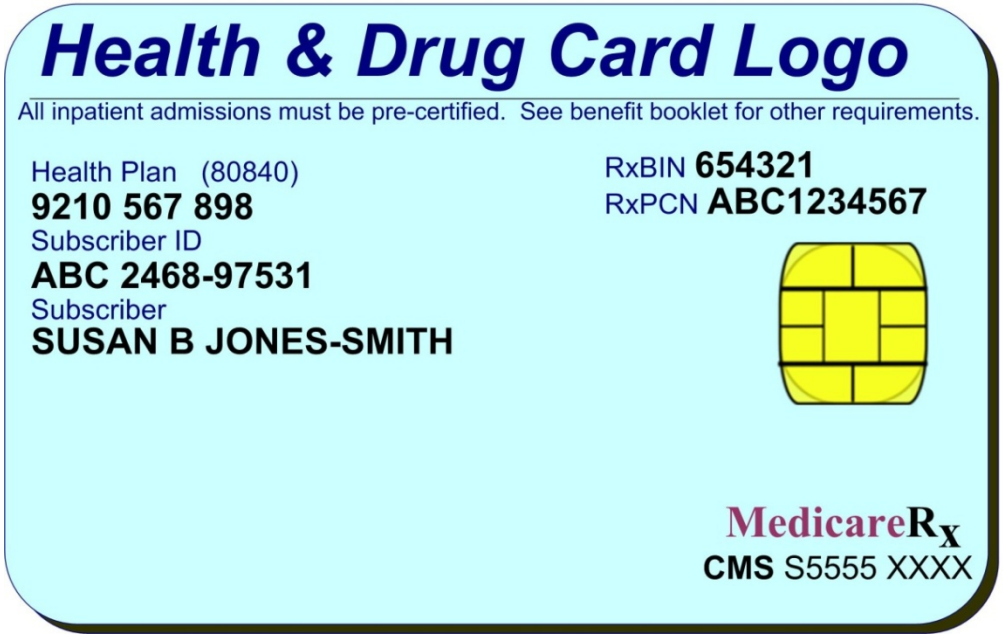


If Health Insurance Cards Were Smart Cards?

1. Unmatched Patient Record error = 10% to 15%
   Could we Lower the Error to Zero to 2%?
2. Could we Improve Patient Care and Safety
3. Could we combat Medical Identity Theft
   (1.85 million victims annually).
4. Could we Reduce Value of Stolen insurance IDs.
5. Could we Prevent Personal Health records from
   being wrongfully disclosed or altered.
6. Could we Save $25 Billion Fraud per year?
   (80% of Fraud is by Claim Submitters.)

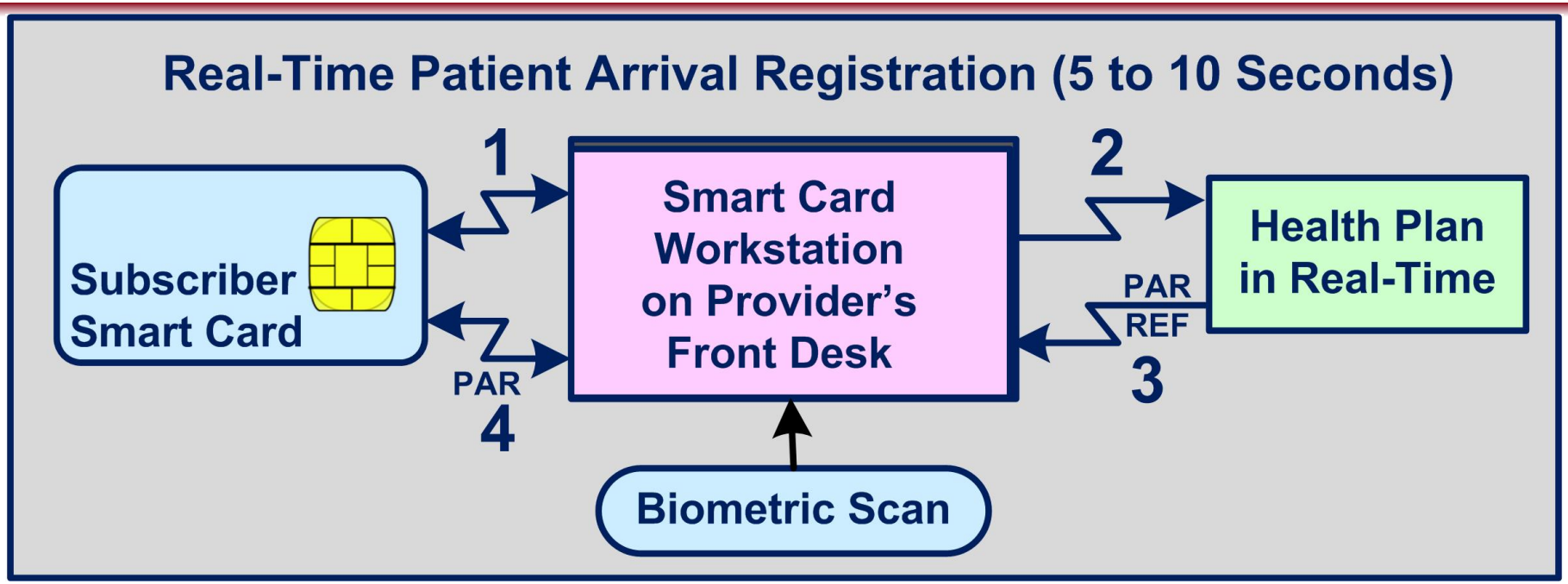
The Operative is Proof That:

- The Patient is who he or she says—Passes a Biometric Test.
- The Patient is identified by the smart card.
- The Patient, Smart Card, and Provider are physically present at same time and place. Stolen insurance information is not enough.
- The Biometric ensures positive patient identification in the Master Patient Index and Health Data Exchanges.

Health Insurance Smart Cards

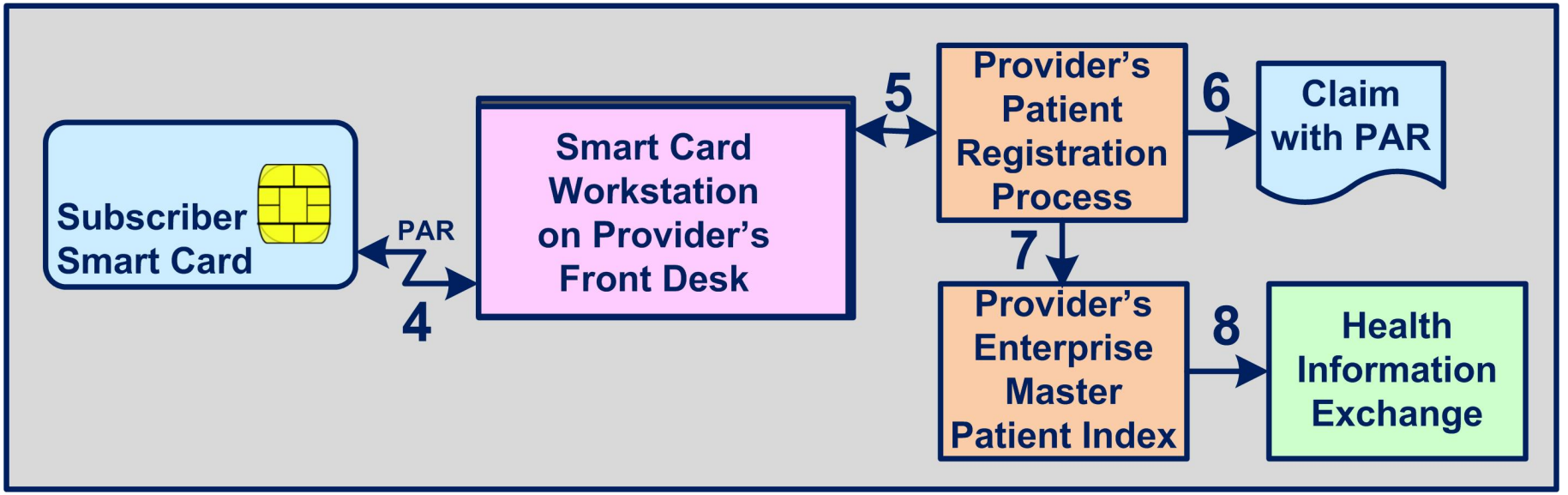
- Required Capabilities:
  - Internally Secure and Very Fast
  - On-Card-Comparison (OCC) of Biometric
  - Encrypt & Decrypt w Public / Private Keys
  - Digital Signature
- Identify Subscriber, Spouse, and Dependents
- A Smart Phone could perform the functions. Can it be made secure enough?
- There has been proposed legislation to try Smart Cards in a Medicare pilot project.

How It Works—Steps 1 to 4



1. Smart Card Receives Provider ID and Date & Time; It Signs the Data.
2. Workstation signs data and sends data and signatures to Plan.
3. Plan validates and returns encrypted PAR reference number
4. Smart Card decrypts PAR

How It Works—Steps 5 to 8



5. Workstation uses Decrypted PAR and Patient Data in Provider's Admissions Process

6. Provider puts PAR on the Claim.

7. Biometric Identifier and Patient Data sent to Master Patient Index

8. Master Patient Index Shares Biometric Identifier and Patient Data with HIE.

Balanced Set of Benefits

Patient:

- Reduced Medical Identity Theft
- Positive Patient ID, so Much More Accurate Records
- Improved Care from Evidence-Based Medicine

Provider:

- Positive Patient ID; better coordination of Records
- Same Systems and Procedures
- Administrative savings from automated ID cards
- Automatic Eligibility and Premium Status Inquiry

Health Plan

- Improved Service to Patients and Providers
- Savings of $25 Billion per year from less Fraud

The Potential from Highly Accurate Health Records

For individual patient: accurate, complete, longitudinal personal health record from different providers; improved patient safety; reduction in redundant tests.

For doctors: Evidence-Based Medicine (EBM) enabling the physician to relate individual data, diagnoses, treatment protocols, and outcomes of patient to profiles from thousands of patients.

For hospitals: improved performance metrics.

For public health: improved knowledge of public health.

For disease & treatment research: accurate and complete longitudinal, de-identified patient health records.

Types of Fraud This Process Combats

- Mass Fraudulent Billing using stolen insurance information.
- Entire Claim is for Service Not Provided, without Patient Collusion.
- Fraudulent Claim with Patient Collusion.
- Fraudulent patient attempts to get medical treatment.
- Provider's Employee Makes Up a Wholly False Claim.
- Fraudulent subsequent encounter claims, after enhancement for these encounters is implemented.
- Black Market claims after enhancement implemented.

Design Issues and Questions

1. Vulnerability from Subsequent Medical Encounters; Solution requires system change.
2. Can the Biometric be Spoofed?
3. Are Smart Cards really able to do all this fast enough?
4. Will Patients accept biometric verification?
5. Will Sufficient Number of Providers Implement this process?
6. Will there have to be a legal mandate to ensure sufficient participation?