Securing healthcare

Smart health identification
Securing healthcare

Identity: The Foundation of Healthcare Information Management

Establishing accurate identification of each person receiving healthcare services or participating in healthcare benefit programs is at the heart of improving healthcare information management. By validating identity and linking this with a patient’s insurance and current medical information, accuracy of medical care increases and the potential of medical fraud is significantly reduced.

Gemalto provides Health Identity Solutions based upon smart card technology—a multi-purpose personal security device—ensuring medical care providers have the ability to validate a person’s identity, insurance information and obtain an overview of the patient’s medical history. Leveraging smart card technology is a cost effective and secure method for unifying this information into one data source which is protected by advanced encryption algorithms and can only be accessed with a patient’s permission through their personal identification number (PIN).

Increase Information Accuracy - Reduce Costs

With Gemalto’s smart health ID card technology, patients will no longer be required to fill out long forms prior to receiving medical attention. When a patient enters a medical care facility, they simply have to insert their smart health card into a reader and enter their PIN code. This instantly provides the healthcare provider with both patient medical history and current insurance information reducing both patient inconvenience and the potential for inaccuracies in data entry.

A smart health card typically does not contain all of a patient’s medical information. While there is not enough storage on a smart card to house an entire electronic medical record, select information can be stored directly on the chip. It can also be used to efficiently point to the patient’s electronic medical record stored on the healthcare organization or health insurance company’s computer network. The card can store basic information such as the patient’s birth date, gender, blood type, allergies, current prescriptions, emergency contact information. Having this basic information on the card could save lives in an emergency.

Accuracy is critical in providing appropriate care and for proper billing. By embedding a patient’s personal medical information onto Gemalto’s smart health card care providers can deliver improved care without the fear of redundant testing or over prescribing medication. If medication needs to be given, the prescription can be loaded onto the same card and be used in place of written prescriptions - significantly increasing accuracy. The patient simply presents their smart card at the pharmacy and punches in their PIN, providing accurate information, diagnosis codes and current insurance information to the pharmacist.

Fraud Reduction

One of the most significant challenges facing the healthcare industry is medical insurance fraud. This occurs due to the lack of a comprehensive process for identifying the person receiving medical care. Many of today’s insurance or health information cards have only the information printed on the front of the card. Magnetic stripe cards or bar code wrist bands provide a name, but it is not associated with a picture or any additional medical information. This leaves the door open for medical identity theft or fraud.

By employing smart health card technology, the card issuer can add security elements to help verify the patient’s identity. Elements like the person’s picture on the front of the card and a physical description (protected by PIN) embedded in the medical records on the card ensure that the person who is insured is the one receiving medical care.
**Additional Benefits**

> **Improve patient care:** Reduction in medical errors. Test results conducted by one practitioner can be available to all practitioners. Before prescribing or e-prescribing a drug, a physician can review a patient’s recent diagnoses, allergies and prescription history and be aware of any over-the-counter drugs that could conflict with the proposed course of treatment.

> **Increase operational efficiency:** Paper-based manual processes increase the risk of human error, resulting in significant avoidable costs to insurers, national health agencies and healthcare providers. With a smart health ID card solution, operational accuracy and efficiency increase. Potential delays in referral and treatments are reduced.

> **Increase speed of claim reimbursement with fewer rejections:** Smart cards can provide clean data for eligibility verification and claims processing. Smart card technology can also improve the healthcare insurance process. Currently, eligibility verification and claims processing can be characterized by redundant information collection, multiple reimbursement forms and delays.

---

**How the patient ID card works**

1. When you go to a hospital, you are issued a personal health card (a contact smart card).
   - The card has your name on it and a digital picture. You are also given a personal PIN code.
   - Your insurance details
   - A snapshot of medical events in your life
   - The exact location of your full medical records
   - Your primary care physician

2. Inside the hospital, your ID card is inserted into a device that reads the information on the card.

3. You enter your individual PIN code.
   - This confirms your identity to the doctor, and lets you approve who can access your information.

---

**How smart health cards work**

A smart health card uses technology that securely stores patient’s personal health information. A microprocessor chip is embedded into the card, making it a "smart" card. These cards are the same size as credit cards, but have a small metal contact plate on the front which is how the reader accesses the medical information stored on the chip. This can only be done with the patient’s permission by entering their PIN code, which has been set by the patient at the time of issuance. This is referred to as “strong” or two-factor authentication—something you have (your card) and something you know (the PIN to access the card). This is employing the same type of access method when using an ATM.

The embedded microprocessor allows for secure storage of personal health information and offers privacy protections unequalled when compared to unsecure ID cards with a magnetic stripe and/or barcode. This information is encrypted ensuring only authorized persons have access to the stored data and protecting the patient’s personal health data in the event the card is lost or stolen. Smart cards can increase the level of identity verification by storing additional identity information including digital signature and biometric templates.

Smart card technology is well established in the United States as a very secure and privacy sensitive technology for identity applications. Many countries already have smart card-based healthcare ID cards. For example, France and Germany have instituted a national health identity card and have issued over a 140 million cards to date.
The world leader in digital security