

Smart Card Technology in U.S. Healthcare: FAQ Series

# **Smart Cards and Patients**

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### 1. What is a smart card?

A smart card is a small card or similar device with an embedded integrated circuit chip. What makes the card smart is the embedded chip. The chip is a powerful minicomputer that can be programmed for different applications.

The chip enables a smart card to store and access data and applications securely and exchange data securely with readers and other systems. Smart card technology can provide high levels of security and privacy protection, making smart cards ideal for handling sensitive information such as identity and personal health information.

For additional information on smart card technology, see the "About Smart Cards FAQ."

## 2. How can smart healthcare cards help patients?

Smart healthcare cards can help patients in a number of ways, all stemming from the card's ability to authenticate a patient's identity when the patient seeks medical care. Identifying the patient is the cornerstone of quality medical care and good health system management.

Accurate identification of each person who receives healthcare has multiple benefits:

- Decreases medical errors
- Expedites the admissions process
- Reduces healthcare costs
- Expedites claims reimbursement
- Reduces the incidence of medical identity theft and fraud

Optimal medical care requires that a healthcare provider have access to all of a patient's relevant medical history and know what medications have been prescribed. Full access can be challenging, as individuals seek care from more than one healthcare organization and fill prescriptions at more than one pharmacy. A validated patient identity can be linked to a healthcare organization's medical records. Using a smart card also allows the patient record numbers assigned by different medical providers to be stored securely and privately. Other personal information, such as a patient's prescription history, name, address, insurance information, allergies, emergency contact information, and other key data can be stored securely on the card.

Use of a smart healthcare card allows patients to bypass the clipboards, paper work, and lines typical of in-patient admission offices or ambulatory care admissions stations. Instead, when entering a

healthcare facility, patients can register by inserting the smart healthcare card into a reader at a kiosk or station. The provider receives the patient's current information and a link to the cardholder's medical records, making the registration and admission process more convenient for the patient. The card's ability to link to and quickly access all of a patient's medical history makes it less likely that doctors will need to order duplicate tests or procedures.

Significant cost savings start at the admissions process and continue through the claims management process. Providing complete and accurate information during the registration process and removing issues caused by a language barrier or human error greatly reduces the incidence of denied or delayed claims. \_

Medical identity theft and fraud is a growing concern for both consumers and providers. Smart card technology supports the use of additional security mechanisms, such as a picture, PIN, or biometric data (e.g., a fingerprint), preventing the use of a lost or stolen healthcare card by someone else. The data kept on the card can also be encrypted so that no one can access the data without permission.

In short, smart card technology can help patients obtain better healthcare that is delivered faster and more cost effectively.

# 3. How would patients use smart healthcare cards?

How a patient uses a smart healthcare card depends on the issuer (e.g., insurance provider, hospital, or government-sponsored medical plan) and the applications that the issuer decides to implement. For example, typical uses could include:

Registering at a physician's office or hospital (Figure 1)

Securely accessing a personal health record, e.g., to check or update information or schedule an appointment Updating personal, insurance, prescription, or medical record information



Figure provided courtesy of Gemalto.

## 4. How do smart healthcare cards protect personal healthcare information?

The chip embedded in the smart card can store various types of information. A smart card can protect information using sophisticated encryption algorithms and allow only authorized access; other smart cards may provide a key that unlocks a particular database on a particular computer. Smart card technology also supports multifactor authentication, requiring the presentation of a second identification factor such as a PIN or biometric data (e.g., a fingerprint) to grant access to personal healthcare information. Smart cards have the capability of providing strong authentication, digital signatures, and security through encryption.

### About the Health and Human Services Council

The Smart Card Alliance Health & Human Services Council brings together human services organizations, payers, healthcare providers, and technologists to promote the adoption of smart cards in U.S. health and human services organizations and within the national health IT infrastructure. The Health & Human Services Council provides a forum where all stakeholders can collaborate to educate the market on the how smart cards can be used and to work on issues inhibiting the industry.

### **About the Smart Card Alliance**

The Smart Card Alliance is a not-for-profit, multi-industry association working to stimulate the understanding, adoption, use and widespread application of smart card technology.

Through specific projects such as education programs, market research, advocacy, industry relations and open forums, the Alliance keeps its members connected to industry leaders and innovative thought. The Alliance is the single industry voice for smart cards, leading industry discussion on the impact and value of smart cards in the U.S. and Latin America. For more information please visit http://www.smartcardalliance.org.