



## PORTABLE SECURE HEALTH INFORMATION

### Health Data Card (HDC) Offers Biometric Medical Smart Card

Omaha, Neb. -- June 1, 2004 -- Health Data Card (HDC) in cooperation with Mpact, Inc. and Biometric Associates has developed a secure biometric (fingerprint authenticated) health smart card. This card interfaces with HDC proprietary patient software in the same way as the company's existing contact smart cards, but only when the fingerprint system verifies the cardholder's identity.

The "match-on" card offers greater security as the smart card itself performs the biometric match. The biometric template is not transmitted to a computer hard drive eliminating any central database of biometrics subject to misuse or access.

This biometric health smart card was introduced at the 2004 Defense Medical & Procurement Conference June 20 – 23 in Baltimore.

The smart cards support the national health information infrastructure as reported by the National Committee on Vital Health Statistics to the US Department of Health and Human Services. The cards help patients, providers, and public stakeholders meet the three health dimensions – personal health information, healthcare provider dimension, and the population health dimension.

With smart cards, consumers have their personal healthcare information at their fingertips, allowing them to control the use of that information and helping consumers manage their wellness and healthcare decision-making.

By providing access to more complete and accurate patient data on the spot and around the clock, smart cards help providers promote quality patient care.

In an emergency situation and in the event a patient may not be able to speak for him or herself, emergency 911 contact and medical information residing on the card chip, is accessible by emergency responders without fingerprint authentication. Portable card readers (PDA's) have been developed by HDC for ambulance and EMT responder use.

#### *Biometric HDCbio Smart Card for Patients*

The HDCbio smart card stores secure healthcare data on a portable smart card. The card serves as a secure key to access medical information on systems with HDC's free software. HDC software is installed in hospitals, doctor's clinics, ambulances, care facilities, dentist offices, pharmacies, etc.

- ✂✂ Patients control and help access their medical history and information.
- ✂✂ Communication is expedited and accuracy of details – ranging from emergency and admitting situations to routine procedures -- is assured.
- ✂✂ The card enables health care professionals to deliver more timely, effective, accurate and cost efficient care, contributing to the prolonging and saving of lives while enhancing medical information management.
- ✂✂ Incorporates biometrics and cryptographics in authorized user's card for security.
- ✂✂ Employs PKI-based digital certificates.
- ✂✂ Fast fingerprint authentication – 600 ms.
- ✂✂ Help's protect user privacy – HIPAA compliant.



## **HDCbio Smart Card Technical Executive Summary**

To enroll a user in the fingerprint identification system, one or more fingerprints of the authorized person must first be registered. This is accomplished in conjunction with an external enrollment station that activates and controls the process. First the user places his/her fingertip on the module's sensor. It detects and captures the small variations in finger surface-capacitance and creates a three-dimensional electrical image of the fingerprint's unique papillary pattern. These signals are verified and then programmed under the control of the enrollment station into protected memory on the module.

Upon completion of the enrollment process the module is "locked" and subsequent placement of any finger on the sensor triggers the verification process. This involves comparing the previously stored "registered" template with the fingerprint image using a special programmed algorithm. With a fingerprint enabled smart card, if the result matches, the person holding the card is verified as it's authorized user.

Providers can implement the smart card system at a stand-alone workstation or in a local area network using a server and distributed workstations. Each workstation operating the software requires a smart card reader to read information from and write information to the patient's card.

An interface with existing practice or HIS software is offered by HDC, thus providing a transparent and efficient data exchange from the card to the clinic or system software.

HDC proprietary software has three user levels: administrative, system and card user. Card user allows access to only the patient information stored on the smart card that is in the card reader at the time. System user access allows access to all records in the system's database, as well as the information on the card in the card reader.

Log-on security and access to patient records is administered and controlled at the system administrator level using a control screen in the software. Log-ons are established using a combination of characters for the user-ID and password and a designation of user level access.

Administrative user access provides the capability to manage all levels of the user and log files. The software tracks activity on the card and in the system. The system log records log-on name, workstation name, date and time, and the action taken (log-in or log-out for each user access event). The card access log tracks the user's log-on name, workstation name, date and time, in addition to patient's record ID, patient's full name and the action taken with each record that has been accessed.

The administrator can review both logs on screen or print a report of the respective log for auditing user and system activities. To control unauthorized viewing of patient information on a workstation screen, the administrator can also control system screen time-out intervals.

HDC is a privately held corporation headquartered in Omaha, Neb. For more information call 866.820.2273 or visit [www.healthdatacard.com](http://www.healthdatacard.com).