

Confidentiality of electronic medical files in Promedico ASP guaranteed by DIGIPASS

More and more general practitioners create electronic medical files about their patients. Exchanging that information with other practitioners and health care providers however, is not as common as it seems. Security and confidentiality remain big issues when it comes to sharing patients' medical records. Promedico ICT Ltd., a leading company offering ICT-solutions for healthcare, introduced its innovative software product 'Promedico ASP' enabling general practitioners to share and exchange medical information in a secure way.

ACCESS TO PATIENTS' MEDICAL RECORDS, ANYWHERE, ANYTIME

Promedico ASP is an online software application allowing general practitioners and other healthcare professionals to access, share and exchange their patients' medical records. The solution aims to support general practitioners to optimally manage the treatment process of their patient even when that patient is under treatment of another doctor. All patients' records are stored on a central ASP server. They are accessible via an internet browser for everyone authorized by the patients' general practitioner. Centralization of medical information allows general practitioners and other healthcare professionals to easily exchange information and improve the quality of the patient's medical care as his complete medical history is always available. Doctors other than the GP, now have access to vital and potential lifesaving information such as allergies, medicine usage, vaccinations and recent diseases; helping them to draw accurate diagnoses and prescribe the best available cure.

Promedico ASP also offers GPs a complete agenda; accountancy, reporting and observation functionalities and a correspondence module with an integrated scanning solution. This concept saves the GP a lot of time and is a considerable relief of his daily tasks. Moreover, as the server, infrastructure and application are all managed by the hosting party, general practitioners no longer need to make back-ups, or install updates and additional software.

Overall, it is a comprehensive software solution that facilitates cooperation between different healthcare professionals allowing consultation and adaptation of patients' medical records anywhere, anytime.



SECURITY AND CONFIDENTIALITY: VITAL SUCCESS FACTORS

Security standards must be very high as GPs and healthcare professionals can access electronic medical records through an open internet connection. In order to secure and guarantee the confidentiality of the data, Promedico took no risks. Data are only accessible through a VPN connection or by using a DIGIPASS assuring that non-authorized persons are unable to retrieve them.

"Our security policy regarding Promedico ASP is very strict", says Robert Verhagen, Operations Manager at Promedico. "It consists out of three steps: authentication, non-repudiation and confidentiality. In order to comply with all three steps, Promedico has built a close administrative procedure."

Authentication is the process of determining whether someone is in fact, who he declares to be. Promedico authenticates general practitioners in person and through the BIG register, a Dutch databank in which recognized healthcare professionals are registered. The GP is obligated to identify himself with a legal and valid practitioner's ID.

Non-repudiation is a way to guarantee that the sender of a message cannot later deny having sent the message and that the recipient cannot deny having received the message. Non-repudiation can be achieved through the use of digital signatures which function as a unique identifier for an individual. In order for GPs to access and adjust information in Promedico ASP, Promedico has deployed VASCO's DIGIPASS technology.

Confidentiality is guaranteed by encrypting the data transmission. Even if information is intercepted by third parties, the content will be illegible.

DIGIPASS DEPLOYMENT, AN AIRTIGHT PROCEDURE

Access to Promedico ASP is protected by DIGIPASS 300. General practitioners wishing to use Promedico ASP in their practice can request a DIGIPASS device for a standard fee. The first DIGIPASS is always delivered in person to the GP who must present a legal and valid identification before signing for receipt. DIGIPASS 300 is a PIN protected authentication device. PIN and DIGIPASS are delivered separately. Upon first use, the GP is prompted automatically to change his PIN code.



To log into the application, the health care professional types his PIN code on the DIGIPASS keypad. The device will then calculate an electronic signature which is entered by the GP in the application. Once the signature is verified by the authentication software VACMAN Controller, the GP can access his patient's medical records.

Electronic signatures generated by DIGIPASS only remain valid for about two minutes. Hence, GPs are forced to identify themselves online in real time. By deploying PIN protected DIGIPASS devices Promedico added an additional security measure assuring that only the GP knowing his personal PIN code, can use the device. Co-workers or third parties therefore cannot use the DIGIPASS to gain unauthorized access to the application. The GP can request additional DIGIPASS devices for his staff through the ASP application. Consequently, only an authorized healthcare professional will be able to request additional devices.

VASCO BRINGS BANKING LEVEL SECURITY TO HEALTHCARE APPLICATIONS

For Promedico, the security of our customers' data is of the utmost importance," said Robert Verhagen. "We opted for VASCO because of the quality of the product, with a security level that is approved by the banking sector and widely used in our home market, The Netherlands. By offering healthcare professionals a fully hosted and secure ASP service, we relieve them from their daily administrative tasks allowing them to concentrate fully on the patient's medical care process", Robert tells us. "The system is continuously updated and upgraded and GPs no longer need to worry about infrastructure, server, security and application management."

"Thanks to DIGIPASS our members can consult their patients' medical records anywhere, anytime. DIGIPASS turned Promedico ASP into a true mobile solution as the use of the portable device is not reliant on a third party's service and can therefore be used virtually anywhere in the world."

DIGIPASS PREFERRED SOLUTION OVER VPN

In the early days when Promedico started its ASP service, GPs could choose between using a VPN or DIGIPASS to securely access the application. Most GPs were tempted to choose the VPN solution because they thought the use of DIGIPASS would be cumbersome.

When Promedico experience problems with their VPN connection, the service was unavailable for several weeks. To remedy the malfunction, Promedico distributed DIGIPASS as an emergency solution allowing GPs to access their patients' files. Once the problem was solved, 19 out of 20 affected customers continued to use DIGIPASS instead of VPN. Today, Promedico hardly ever offers the VPN solution as the use of DIGIPASS gained wider user acceptance.



Objective

Provide secure access to Promedico's online application for authorized users only and protect medical records from confidentiality breaches.

Challenge

Access to Promedico ASP must be secured without needing to install additional soft- and hardware in the GP's practice. Patients' medical files should be accessible for authorized at any given time and location. Security standards must comply with local legislation.

Solution

Access to the patients' medical files in Promedico is secured by VASCO's DIGIPASS 300 in combination with VACMAN Controller. DIGIPASS 300 has an e-signature functionality allowing GPs to sign their messages and update their patients' records in a secure way.



About Promedico

Promedico ICT Ltd., independent since 2001 is housed in Nieuwegein (The Netherlands). The company employs 40 people to develop and support its products, among which Promedico ASP. Over 1,950 general practitioners and over 5,000 other users, use Promedico's General Practitioners' information systems daily. Promedico's shares belong for 100% to the Foundation 'Automation General Practitioners'. The Foundation's mission is to initiate and implement developments for the automation in the healthcare sector in general and for general practitioners in particular.

About VASCO

VASCO is a leading supplier of strong authentication and e-signature solutions and services specializing in Internet Security applications and transactions. VASCO has positioned itself as global software company for Internet Security and designs, develops, markets and supports patented DIGIPASS®, DIGIPASS PLUS®, VACMAN®, IDENTIKEY® and aXsGUARD™ authentication products. VASCO's prime markets are the financial sector, enterprise security, e-commerce and e-government.

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