

## Bedside scanning and patient safety

# Dôvera Health Insurance creates transparent prescription process for safer medications

Dôvera Health Insurance, a privately owned company, decided to streamline the prescription fulfilment process for its healthcare providers, pharmacies and patients. The company developed a system that relies on GS1 standards to uniquely identify each prescription. Now the new process is completely automated and transparent for all players. Doctors issue prescriptions online with access to patients' electronic health records. Pharmacies can easily verify the authenticity of prescriptions and are reimbursed much more efficiently by Dôvera. With Dôvera's mobile app, patients stay engaged and informed with alerts and useful information about their healthcare. Emergency rescue and ambulance workers can access online prescription data when treating Dôvera patients.

*By Radomír Vereš*



## Making fundamental changes

Dôvera Health Insurance is one of the largest insurance companies serving the healthcare needs of 1.4 million Slovakian citizens. One of its many services is supporting pharmaceutical reimbursements in Slovakia where expenditures for drugs—as a percentage of total healthcare and the amount spent per capita—are some of the highest in the European Union and the Organisation for Economic Co-operation and Development (OECD).

Counterfeit prescriptions of these expensive pharmaceuticals have become a growing problem for healthcare providers, insurance companies, pharmacies and patients alike. At the same time, inefficiencies in the prescription fulfilment process has led to duplication in prescriptions and health risks—potentially severe or life-threatening—associated with adverse drug interactions and overdoses.

“We decided to address these issues by making some fundamental changes to the prescription process—to automate and make it more secure for the benefit of patients, doctors and pharmacies,” says Radomír Vereš, Chief Financial Officer with Dôvera.

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## Significant time, labour and risk

Before these changes, the process was primarily manual and quite risk-intensive. When prescribing a drug, the doctor would complete a paper form with a signature or stamp as verification—a step in the process that could easily be falsified.

In addition, the doctor did not have access to the patient's health information such as current treatments and use of other drugs.

Even though doctors were conscientious about prescribing drugs, without a method to crosscheck potential interactions with other drugs or allergies, this still meant inherent risks for patients.

The pharmacy fulfilled the prescription by “visually” verifying the doctor's stamp with no real-time confirmation of the patient's identity or health history. Based on the type of insurance coverage, the patient would make either partial payment or no payment to the pharmacy. Each month, the pharmacy would manually re-enter all prescription information into its software program and submit all fulfilled prescriptions for reimbursement by Dôvera and other appropriate insurance companies.

Since Dôvera only received submissions monthly, it could mean up to a six-week delay of receiving and processing payments to pharmacies as well as updating its patients' electronic health records. In addition, the review process was labour intensive and manual, resulting in time delays for pharmacies receiving payments. And in cases of discovered counterfeit prescriptions, pharmacies would receive no payment at all.

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## Identifying each prescription and reducing drug interactions

Consulting with GS1 Slovakia, Dôvera learned about GS1 standards. “We needed a standardised yet unique way to identify each prescription,” explains Vereš. “We selected GS1 since it provided a global system of unique identification that would support our requirements today as well as meet the needs of the Slovakian insurance industry in the future. In other words, if other insurance companies adopted a similar solution in the future, we can be assured that prescription identifiers will not be replicated among all companies using global GS1 standards.”

Dôvera, working with GS1 Slovakia and solution providers, developed the new prescription fulfilment process where each individual prescription now receives a GS1 Global Document Type Identifier (GDTI) with a serial number. The doctor creates each prescription online, with access to the patient's electronic health records, including the current list of drugs being taken. The Dôvera system assigns the serialised GDTI, and using the Dôvera system software, the doctor/healthcare provider prints the prescription with the GDTI encoded in a GS1-128 barcode. And because the prescription is electronic, the pharmacist can easily access it by scanning the barcode.

Each prescription is created online with a GDTI encoded in a GS1-128 barcode that uniquely identifies it.





Pharmacies using the new Dôvera prescription system save significant time and get reimbursed much faster by scanning the prescription's GDTI encoded in a GS1-128 barcode.

Dôvera is the first insurance company in Slovakia to introduce electronic health records for its insured patients. "Our system notifies the doctor if there is a duplication, conflicting interaction between drugs, or risk of overdoses," advises Vereš. "It's a much safer and efficient process for doctors and their patients."

Upon receiving the prescription, the pharmacist scans its GS1 barcode with the unique identifier. The Dôvera system verifies the patient's identity and the intended prescription, thus eliminating the risk of counterfeits. Pharmacies can now be assured they will receive payments for the prescriptions they fulfil. The newly fulfilled prescription is also added to the patient's electronic health record for future verification and ongoing safety measures.

The new process also means substantial time savings for the pharmacy. Previously, the pharmacist had to manually type all information from the written prescription to complete the fulfilment in the pharmacy's software. Now the prescription has already been created in the Dôvera system by the doctor when printing the prescription with a barcode.

"By scanning the barcode upon fulfilment, the pharmacy sends the prescription to Dôvera for reimbursement," explains Vereš. "It's a highly efficient process for us. Since Dôvera processes more than five million prescriptions each year, this translates into significant time and cost savings."

## Delivering transparency for health

For patients, the new Dôvera prescription process delivers improved health outcomes since it significantly reduces errors. In fact, Dôvera reports a 22 percent decrease in interactions with major consequences.

"There has also been a continuous decline of the number of patients taking more than five different medications simultaneously," says Vereš. "This reduces health risks since the more medications a patient takes, the higher the risk of potential interactions."

"If a patient visits her general practitioner in one town and specialist in another, all of her health records are now in one place," continues Vereš. "And as doctors use the new process to issue new prescriptions, her health record is automatically updated and accessible online while her personal data is well protected."

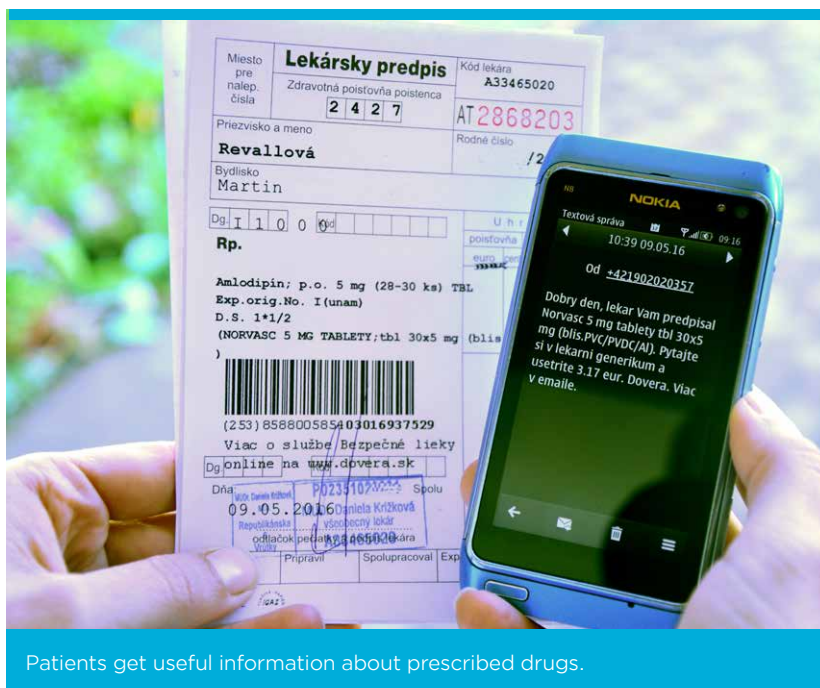
Patients can also use the new system to be an active part of their own healthcare management. With the mobile app, they access all types of useful information online like a list of prescribed drugs. They get alerts via text notifications when their doctor creates a prescription for them, about possible interactions and the availability of cheaper generic versions. This also enables patients to identify potential fraudulent prescriptions and contact Dôvera immediately.

"With GS1 standards, the prescription process has become transparent," says Vereš. "All players including patients now have visibility into the creation and fulfilment of prescriptions for authentication and verification, which all add up to patient safety."

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## For safety's sake

In only six months, Dôvera developed the new prescription system for less than €1 million. As of October 2015, 40 percent of all healthcare providers (3,700 total, including doctors, nurses, pharmacists and other providers) have adopted the new system using GS1 standards.

To speed adoption of the new system, the company co-paid for all software development costs; for doctors, hospitals and pharmacies, using the upgraded system meant simply installing the new software version. “Our target is to increase the doctor adoption rate to 90 percent, especially considering the safety benefits for our patients,” says Vereš.

Dôvera understands that healthy patients are not only good for their own well being, but are also good for the well being of Slovakia's healthcare system. By gaining greater efficiencies and virtually eliminating counterfeits in its prescription process, Dôvera—with help from GS1 standards—is leading the way for healthier outcomes in Slovakia.

## About the Author



**Radomír Vereš** is the Chief Financial Officer and member of the Board of Dôvera Health Insurance.

Since 2006, Vereš has worked in healthcare, starting as the CFO of the Children's University Hospital in Banská Bystrica, Slovakia. He later moved to the University Hospital F. D. Roosevelt in Banská Bystrica as its CFO. He is currently focused on strategic projects for the company such as the creation of Dôvera's prescription fulfilment process.

## About Dôvera

Dôvera Health Insurance is a major, privately owned health insurance company in Slovakia with an estimated 30 percent market share. It is currently Slovakia's second largest healthcare insurance company, serving its 1.4 million members with a broad portfolio of services.

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