Summary

CUSTOMER

Association of Care Providers for Care Communication (VZVZ)

CHALLENGE

Creating a National Switch Point solution for fast, secure, and safe exchange of patient data among Dutch healthcare providers (hospitals, general practitioners, and pharmacies).

OUTCOME

A nationwide system with regional segmentation can handle over a billion messages annually and is prepared for smooth expansion. It is compliant with the extremely stringent government requirements for acquiring explicit permission to share patient data.

Association of Care Providers for Care Communication + InterSystems

Netherlands Health Information Exchange Wins Trust of Millions

Seventeen million people live in the Netherlands, and 13 million have so far given permission to make their medical files available via National Switch Point (LSP), the national healthcare information exchange system powered by InterSystems HealthShare®. The number is noteworthy in the Netherlands, where the balance between citizens' privacy and the value of a shared, unified medical record is of paramount importance.

Sharing Medical Information While Ensuring Privacy

In 2005, the Dutch government began to develop a national system for healthcare providers to exchange patient data electronically. It commissioned the Netherlands National Competence Center for eHealth, which selected a team, including system integrator DXC Technology and InterSystems, provider of HealthShare and InterSystems data platform technology. By the end of 2006, the team built a system to exchange patient information in electronic medical records from care providers (hospitals, general practitioners, and pharmacies) in three months. The care providers involved clearly recognized the significance of the LSP and value of a virtually unified care record in improving care and preventing mistakes.

The exchange system operated as an intelligent router of healthcare information, which offered a combination of high performance and unlimited scalability with an extremely high level of security. Still, government officials raised objections, fearing that the privacy rights of patients might be infringed in a centralized system of a government-run organization. In 2011, the system was privatized and, since then, has been run by the Association of Care Providers for Care Communication (VZVZ).

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Historical Privacy Concerns Addressed

Confidence in the LSP is steadily increasing, largely because VZVZ devotes so much attention to patient privacy, as guided by Dutch law.

Dutch legislation sets stringent requirements when it comes to acquiring explicit consent to share patient records. All general practitioners use a certain form of digitized files, for example, to share electronic data with fellow professionals or process the information of others.

Access to the LSP is further restricted to healthcare professionals with a Unique Healthcare Provider Identification (UZI) card, which specifies the role of its holder, and strict protocols determine which providers see which parts of the record. For example, only an authorized general practitioner can access the professional summary compiled by a colleague. Pharmacists or their assistants can view only medication data that could be connected with any intolerance, contraindications, and allergies.

> **"We ensure that information is shared purely on a need-to-know basis," says Joris Smits, Director of Operations at VZVZ. "Furthermore, we accredit the 16 network providers who transfer the data swiftly and safely within the private Zorgnet network. This calls for mutual confidence throughout the healthcare chain, and therefore also patients' confidence in the physician. Patients have online insight into who shares their information."**

Scaling in Membership and Capacity

In 2019, in addition to patient subscriptions, the number of institutions looking to share healthcare records using the LSP also continues to rise. VZVZ receives numerous applications from organizations focused on the elderly, youth, and mental health, because they can provide more complete care when they have access to an electronic record. Membership in the LSP association requires active participation to both ensure compliance with the requirements and maintenance of the high quality of data exchanged.

The platform can continue to expand smoothly, thanks to its built-in redundancy, which includes a two-mirrored server environment. If one server should malfunction, the other can resume its tasks without delay. The technology also provides a monitoring mechanism, which activates rerouting whenever there is a threat of delays.

"There are few platforms in the care market whose technology incessantly continues to prove itself in terms of both capacity and processing rate," Smits says of HealthShare. "The system handles over a billion messages annually, while offering extremely high operational reliability throughout the chain of care providers who exchange information."

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