

SUNDHED.DK CITIZEN'S HEALTH PORTAL

New public healthcare portal cuts admin costs by 80%

Back in 2002, the Danish public health sector faced a very specific challenge: how to share sensitive patient information with both patients and healthcare professionals in a secure and efficient manner. The solution was to create Sundhed.dk, an online portal that collects healthcare information from 85 different sources, and enables both healthcare professionals and the general public to access it.

Launched in 2003, Sundhed.dk is accessible 24/7 via a secure log in, and it gives users up-to-date medical information, ranging from general health advice to patient-specific treatment records. But after five years of service, the portal was proving costly to maintain and adding new features was extremely difficult.

Sundhed.dk asked NNIT to create a new portal that was cheaper to run and easier to update. The resulting portal now saves Sundhed.dk approximately 80 percent in running costs each month.

THE CHALLENGE

Sundhed means health in Danish, and the Danish Health Service's portal, Sundhed.dk, draws together healthcare information from hospitals and clinics around the country. Once a Danish resident has a Digital Signature, they can access the portal to view personalised pages, including an electronic medical journal, information on prescribed medicines and general information about their specific medical condition.

Healthcare professionals use the portal to get up-to-date information on patients, regardless of where they were last treated, including treatment records dating back to 1997. They

can also send emails in a secure environment, check hospital waiting lists and access other essential data.

The portal provides an extremely useful service – but after five years, the original portal vendor no longer supported the software used. This made the portal too expensive to maintain – and meant that developing new functionality was time-consuming and costly.

Lars Carstensen, Vice Director of Sundhed.dk, explains, “We had to spend a huge amount of money if we wanted to upgrade to a new version in order to be able to implement new functionality, so we decided to change to Microsoft.net. This would give us more vendors to choose from when upgrading the system, and give us access to better priced solutions.”

But Sundhed.dk still needed someone to create the new portal. As a government institution, the company already had a list of approved suppliers – and eventually chose NNIT. “We liked the methods that NNIT suggested,” says Lars Carstensen. “And they weren't afraid to take on the task even though we had a relatively small budget.”

THE SOLUTION

Most portals are delivered as pre-packaged software, but the Sundhed.dk portal had to be built from the ground up using Microsoft.net. NNIT has extensive knowledge of this kind of work, but according to Lars Andersen, Vice President at NNIT, it was still a huge project. “Sundhed.dk needed a completely new portal that had exactly the same functions and appearance to users. But it had to be cheaper to run, easier to add new functions – and it had to give faster response times.”

To deal with the scale of the project, NNIT engaged a number of programmers to build a team of 30 people dedicated to the project – and both NNIT and Sundhed.dk assigned a full-time project manager to ensure there was constant dialogue between the two teams, especially when designing the new portal's architecture.



“Monthly running costs have dropped by 80 percent”

LARS CARSTENSEN, VICE DIRECTOR, SUNDHED.DK

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Developing IT architecture requires a careful balance based on user requirements. For example, creating a tight connection between the portal and an external system enables faster response times, but it also means less flexibility, which can make developing new functionality harder in the future.

"There's a lot to think through during the architectural design phase," explains Lars Andersen. "Getting it right involves close contact with the customer – so you understand exactly what they need and where they might like to go in the future."

THE RESULT

The Sundhed.dk portal provides a vital link between clinics and hospitals around the country and their patients. All 98 Danish municipalities have access and the site registers more than 300,000 unique visitors a month – a very high figure considering the Danish population totals just 5.4 million. It has also inspired similar projects in Sweden, Singapore, Canada and Germany.

Completed in early 2009, the new Sundhed.dk portal is proving extremely successful. "We really get a lot of praise from users about the response time," says Lars Carstensen. "It takes just 0.2 seconds after you click to when you view a page. And the architecture allows us to increase the number of servers whenever we need to scale up our service. Also, the portal is much more stable now. From 1 April to 1 December, we had just ten minutes of downtime – and that was caused by the temporary failure of the external internet connection."

The service-oriented and standardised architecture means that new functionality can be implemented at a low cost with a minimal time to market – and Sundhed.dk will soon start implementing new functionalities, such as a module for sharing x-rays online.

And the biggest benefit? "Monthly running costs have dropped by 80 percent," says Lars Carstensen. "Even if you factor in the new people we've hired to update the system, it's a significant saving."

ABOUT SUNDHED.DK

Sundhed.dk is the official eHealth Portal for the Danish Healthcare Services. The portal makes it possible for patients, their families and healthcare professionals to access information and treatment options, and to communicate with each other. A growing company, Sundhed.dk currently employs 30 people.

OTHER PORTAL PROJECTS

- Borger.dk citizen's portal covering all public e-services in Denmark

ABOUT THE SUNDHED.DK PORTAL

- Built from the ground-up using Microsoft.net
- Digital Signature secure log in
- Low running costs
- Open platform for simple functionality upgrades

For further information

Please contact us at nnitcontact@nnit.com to learn more about the case or our portal services.

ABOUT NNIT

NNIT is an international IT service provider offering IT consulting and the development, implementation and outsourcing of IT services for regulated industries. We create value for our clients by treating their IT as if it were our own. We use IT to support our clients' daily operations and help them achieve their business goals. Owned by Novo Nordisk, NNIT employs nearly 1,400 people. In 2008, our turnover exceeded €185 million.