

## eHealth

priorities and strategies  
in European countries



Fact sheet

# Netherlands

March 2007

Towards the Establishment  
of a European eHealth  
Research Area





# Netherlands

## Strategic perspective

In recent years the Dutch government, the National IT Institute for Healthcare (NICTIZ) and healthcare professionals have together laid the foundation for nationwide electronic communication, and exchange of medical data, in the healthcare sector. The expectation is that good use of ICT will contribute to the quality, effectiveness and accessibility of healthcare, now and in the future. In particular, medical staff will be better enabled to provide the requisite care through improved access to accurate and up-to-date data on patients.

The national infrastructure for healthcare (AORTA) is due for realisation in 2006 and will enable the secure and reliable exchange of medical information. It consists of several components, such as a National Switch Point (NSP) which provides a reference index for routing, identification, authentication, authorisation and logging. An extensive identification and authentication system for both patients and healthcare providers, and 'Well-Managed Healthcare System' (GBZ) criteria ensure the systematic and secure storage of medical data.

As the core of medical applications, the Netherlands has its sights set on a national Electronic Health Record (EPD): a secure environment in which client/patient data stored in different systems can be retrieved, exchanged and cogently shown to authorised healthcare providers to support the healthcare processes. This 'virtual' EPD is compiled from a collection of applications connected to the national AORTA infrastructure. The Netherlands is gradually moving towards a fully-fledged EPD. An Electronic Medication Record (EMD) and an Electronic General Practitioner's Record (WDH) will be introduced first, but many more care applications are also being developed.

The expectation is that good use of ICT will contribute to the quality, effectiveness and accessibility of healthcare, now and in the future. In fact, to even ensure the continued existence of an efficient health care system, ICT

usage is inevitable. In particular, medical staff will be better enabled to provide the required care through improved access to accurate and up-to-date data on patients.

### ELECTRONIC MEDICATION RECORD (EMD):

The Electronic Medication Record gives healthcare providers insight, accessible via their own information system, into the medication history of specific patients. This information stays at the source (e.g. information system of a hospital, pharmacy, GP practice) but is available to providers and prescribers of medication: public pharmacies, hospital pharmacies, GP practices, locum posts, hospitals, mental health institutions, and residential care and nursing homes.

### ELECTRONIC GENERAL PRACTITIONER'S RECORD (WDH):

The GP shortage, an ageing population, an ageing professional group, plus the fact that many of the newly qualified GPs prefer to work part-time have precipitated the emergence of locum posts in recent years. At the moment the GPs who stand in for their colleagues in the evenings and weekends typically have hardly any access to the medical history of the patients. An Electronic General Practitioner's Record will provide the locum with a summary of the patient's history. The records will remain with the regular GP and will only be accessible to a locum. Information gained during the consultation is automatically relayed to the regular GP in the form of a locum report. The information appears on the screen of the GP, who checks it and adds it to the records at the touch of a button.

## Implementation perspective

In the EMD/WDH implementation programme the components of the basic infrastructure and the first two applications come together. To ensure optimal care and attention the implementation process has been split into two phases:



# Netherlands

## ① PROOF OF CONCEPT (POC):

The first step is to ensure that the different components will operate in concert in a test environment. The implementation of the Electronic Medication Record and the Electronic General Practitioner's Record therefore commences with a 'Proof of Concept' (PoC). In the PoC all the constituents of the chain are tested in concert under laboratory conditions. This will show whether the national facilities are working effectively and whether the tested healthcare systems are operating correctly and safely in tandem with the national facilities.

## ② PILOTS IN SELECTED REGIONS:

Once the PoC has been successfully completed the systems of the suppliers can be implemented in the environments of the healthcare providers. In this second phase the results from the PoC are introduced in eleven selected regions. Five EMD and six WDH pilot regions have been selected for this trial and will receive active assistance in their introduction of one or both applications. Together, these pilot regions cover 1,000 healthcare providers and approximately two million records.

If both phases prove successful the national roll-out begins early in 2007.

## Future activities

Most of the ICT implementation agenda for the coming period is still to be determined. The introduction of new applications will be prioritised based on the technological possibilities and the needs and wishes of the patients, the healthcare providers and the insurers. This is being done via a two-pronged administrative model in which an 'IT and Innovation Platform' group sets the agenda for new ICT activities and an 'IT and Innovation Steering Committee', decides on the actual future developments and the sequence in which they will be implemented.

In the next few years, various 'chapters' will be added to the EPD, which will thereby be extended to other profes-

sional groups and domains (e.g. welfare, juvenile care). This step-by-step approach should eventually lead to an umbrella collection of exchangeable data for all the healthcare providers. The following initiatives (among others) will be launched in the near future:

- Extend the EMD by adding electronic prescription functions for healthcare providers,
- Extend the EMD to other professional groups,
- Extend the WDH with an emergency data set,
- Develop the components for an electronic diabetes record (integrating the complex chain of healthcare providers), among others, a self-management tool which gives patients access to their own diabetes data,
- Develop an Electronic Child's Record (EKD). From 1 January 2007 every child born in the Netherlands will each have their own EKD, containing information on the child, the family situation and the environment. The records will be administered by doctors and nurses in the juvenile healthcare sector,
- Create conditions whereby patients get electronic access to their own record. At the moment policymakers are considering the possible use of an electronic National Identity Card as a means of patient access.

## Core resources

### ICT in Dutch Healthcare

[http://www.minvws.nl/images/ict-in-nl\\_tcm20-108136.pdf](http://www.minvws.nl/images/ict-in-nl_tcm20-108136.pdf)

### Ministry of Health, Welfare and Sport

[www.minvws.nl](http://www.minvws.nl)

### Nationaal ICT Instituut in de Zorg

[www.nictiz.nl](http://www.nictiz.nl)

### UZI-Register

[www.uzi-register.nl](http://www.uzi-register.nl)

## About eHealth ERA

This fact sheet is the outcome of research in the context of the *eHealth ERA* project (Towards the Establishment of a European Research Area). The project is implemented by empirica GmbH (coordinating partner, Germany), STAKES (Finland), CITTRU (Poland), ISC III (Spain), CNR (Italy) and EPSRC (United Kingdom), based on a Coordination Action contract with the European Commission.

The European Commission, Directorate General Information Society and Media, supports this project to contribute towards greater transparency across Member States and other participating countries on eHealth strategies as well as innovation-oriented research and technology development (RTD) initiatives, including the coordination of Member States' eHealth strategy formulation and implementation.

The fact sheet is an excerpt from the report "eHealth priorities and strategies in European countries", published by the European Commission in April 2007. The complete report is available for download at [http://ec.europa.eu/information\\_society/newsroom/cf/itemlongdetail.cfm?item\\_id=3346](http://ec.europa.eu/information_society/newsroom/cf/itemlongdetail.cfm?item_id=3346).

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