Electronic transfer of medication data is gaining momentum

Improved drug safety through effective electronic exchange of medication data with patients and other healthcare providers. That is the goal of the program 'Medicatieoverdracht' (Transfer of Medication Data). Implementation has already started in two regions.

The problem

Every week, an average of 75 people are hospitalised as a result of a preventable medication incident. Some of these incidents happen because healthcare providers don't know exactly what medication the patient is on, and they end up prescribing a drug which should not be combined with another drug the patient is taking.

Of course healthcare providers do their best to make sure that the available list of medications is as complete and up to date as possible. They spend a lot of valuable time calling or emailing colleagues or asking the patient about their medications. Even so, they're not always able to get a complete picture. Why is this so hard? The problem is that the information is stored in the information systems of different healthcare providers such as general practitioners, medical specialists and dentists. Unfortunately, these health information systems are not set up to exchange information with each other or can only exchange limited information.
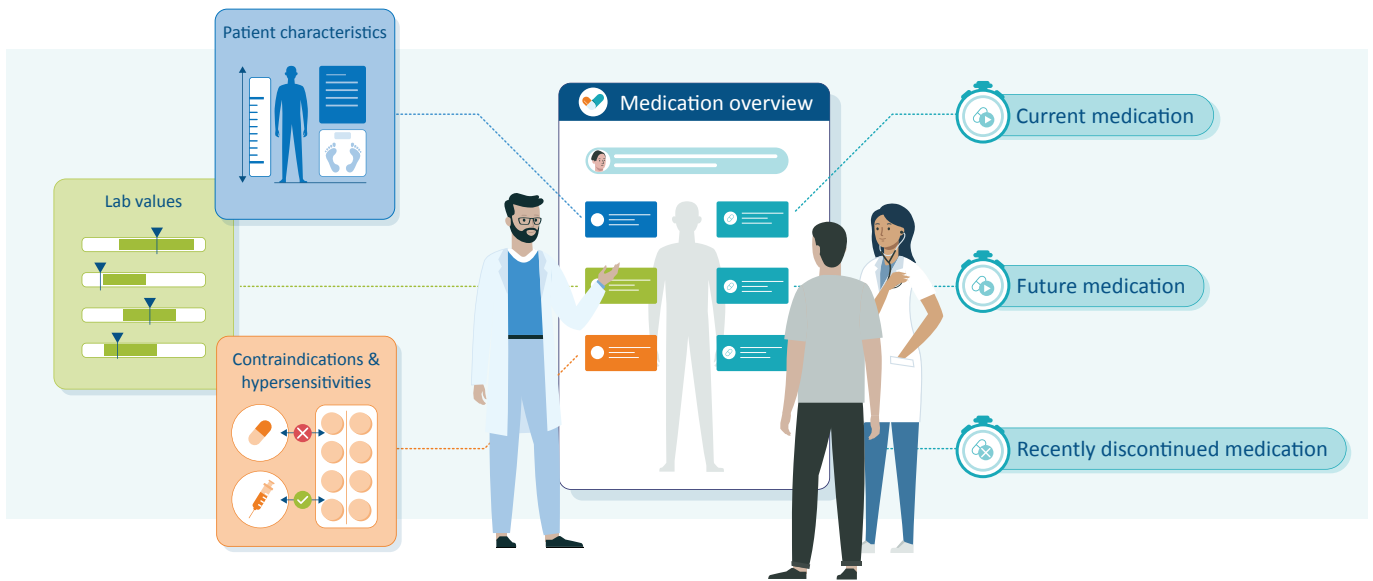
The solution

The program 'Medicatieoverdracht' solves this problem by making sure that healthcare providers and health information systems speak the same language and by coordinating medication-related processes in different healthcare sectors with each other. What medication information do we need, how to we record this information and how do we share it with each other? Participants in the program have made agreements which are now being implemented.

The program is based on the guideline Transfer of Medication Data in the Chain, published in 2020 by the Dutch National Health Care Institute. This guideline has been endorsed by all healthcare sectors that deal with medication, patient organisations and health insurers. The guideline specifies the medication data that should be available to every healthcare provider who prescribes, dispenses or administers medications and that these healthcare providers are responsible for verifying this information.

This basic set of medication data is exchanged in accordance with the following three information standards: Medication Process 9 (completed), Lab Values for Medication (in development), and Contraindications and Intolerances (in development). Information standards provide detailed descriptions of the agreements healthcare providers and software suppliers have made about the exchange of information. These agreements include the types of data that are recorded and exchanged, who does what and what terminology will be used. Based on these agreements, the software suppliers adapt their health information systems to enable the electronic exchange of medication data. The goal of the program 'Medicatieoverdracht' is achieved when for every patient a complete, up-to-date list of medications is available to healthcare providers and the patients themselves with one click of a button. Since the suppliers of Personal Health Environments (PHEs) are adapting their software as well, patients will have complete access to their own medication data.

Besides the list of medications, the program 'Medicatieoverdracht' also improves the digital transfer of prescriptions and the administration list for administrators.

The program 'Medicatieoverdracht'

The program 'Medicatieoverdracht' is a joint effort between 9 healthcare sectors (speciality care, VVT [nursing, care and home care], primary care, disability care, public healthcare, mental healthcare, public pharmacies, thrombosis care, dental care) and the patient & client sector. All relevant associations and organisations from each sector are involved. Each sector has its own Medication Data Transfer team, which includes healthcare providers as well as software suppliers. Altogether there are about 75 software suppliers, which supply software to more than 16,000 healthcare professionals.

Nictiz is responsible for managing the program 'Medicatieoverdracht'. The national team coordinates all multisectoral activities, provides expertise and supports the implementation. The Nictiz national team works closely with the Association of Healthcare Providers for Healthcare Communication (VZVZ). VZVZ provides a number of shared facilities (infrastructure and services) that are preconditions for the transfer of medication data. The Ministry of Health, Welfare and Sport has a Medication Data Transfer program team as well. Other participants include Zorgverzekeraars Nederland (organisation of health insurers) and RSO Nederland.

Implementation

In October 2022, 13 healthcare providers, 8 suppliers of 10 health information systems and 3 suppliers of PHEs began testing out the exchange of medication data as part of the Medication Data Transfer Kickstart. The program has been gaining momentum since then. The software suppliers are working on implementing the 'Medication Process 9' information standard in their systems. This is done in two regions under the leadership of two Regional Collaborative Organisations (RSOs): RSO RijnmondNet in the Rijnmond region, and RSO GERRIT in Friesland.

Testing of the adapted software started in July. During test days, all participating software suppliers, representatives of GERRIT and RijnmondNet, and program content experts get together to see if they can successfully exchange information in accordance with the new information standard. Healthcare providers have been getting involved as well. They are not just interested in the accurate transfer of information. The user-friendliness of the system is equally important. Is the information easy to find? Can I get to where I need to be without unnecessary clicking? These are important acceptance criteria for healthcare providers. Once the software has been tested and adjusted if necessary, the healthcare providers who are participating in Kickstart will start using the software sometime in 2024.

Software suppliers in the Medication Data Transfer Kickstart

These software suppliers are participating in the Medication Data Transfer Kickstart and are therefore the first ones to implement the Medication Process 9 information standard. Health information system suppliers: ASolutions, CareConnections, CGM, Chipsoft, FarMedvisie, Dedalus, Medimo, SmartMed PHEs: Medxprt, Quli, Zorgdoc.

National upscaling

Once the first small group of healthcare providers is working with the software and exchanging medication data, the program will be scaled up as soon as possible to larger groups of healthcare providers in the Netherlands. This is expected to happen in 2026. The first upscaling is planned for the two regions where Kickstart is currently in progress. More and more healthcare providers in those areas will start using the new system to exchange medical data. The next step is for new regions to join in. The transition won't take long, especially for healthcare providers whose software suppliers are participating in Kickstart (see inset), since the software will be ready for use. Discussions with the "second

batch" of participating suppliers are at an advanced stage as well. Sanday and Epic, for example, are expected to start adapting their software soon.

At a certain point we will have a situation where some Dutch healthcare providers are able to exchange medication data in accordance with the Medication Process 9 information standard while others are not. The program is set up so that information can still be exchanged during that period without compromising drug safety. Of course, healthcare providers won't reap the full benefits of the adapted software until all partners in the chain are using it.

Statutory requirement
The Electronic Data Exchange in Healthcare Act (Dutch Wegiz) went into effect on July 1, 2023. The Wegiz is a framework Act which sets out the priorities for mandatory electronic data exchange by means of 'General Administrative Orders' (Dutch AMvBs). The transfer of medication data is one of the five types of data exchange that are prioritised under the Wegiz. This means that healthcare providers will be required to use software that is certified in accordance with NEN standards such as NEN7503 or NEN7542, which is currently being developed. These NEN standards are based on the Medication Process 9 information standard, which in turn is consistent with the Transfer of Medication Data guideline.

The first step towards the mandatory exchange of medication data in accordance with NEN standards is the General Administrative Order requiring general practitioners, pursuant to the Wegiz, to send prescriptions electronically to pharmacies or general practice pharmacies as of January 1, 2024.

Is there anything you can do right now?
Eventually, all healthcare providers in the Netherlands will be required to exchange medical data in a standardised electronic manner. What can you do to prepare right now?

- Make the transfer of medication data a topic of discussion at your healthcare organisation. Assign one person to keep up with the latest developments.
- Address the topic in your regional or chain collaboration meetings as well. After all, exchanging medication data is a collaborative activity by definition.
- Ask your software supplier when they expect to start implementing the electronic transfer of medication data.
- Start talking to your software supplier about specific preconditions for electronic data exchange, such as compatibility with the Landelijk Schakelpunt (national exchange point, LSP) and other tools such as ZORG-AB (directory of healthcare providers) and Mitz (consent management platform). Visit www.vzvz.nl/diensten for more information. LSP is the infrastructure used in Kickstart, but in the future it may be possible to exchange data via other infrastructures as well.
- Contact the Medication Data Transfer team for your sector; contact details are available on the website **www.samenvoormedicatieoverdracht.nl**.
- Stay informed about the latest program developments. Sign up for the newsletter (in Dutch) or follow "Samen voor medicatieoverdracht" on LinkedIn. Questions? Send an email to **contact@medicatieoverdracht.nl**.

This article was published in Dutch in ICT & Health Magazine no. 6 (December) – 2023.