

Parnassia Group, the Netherlands

# Care and security at the core: **psychiatric care group connects centres and labs**, to better serve the patient

The Parnassia Group uses CyberLab for its e-Lab project to integrate laboratory result consultation and order entry

**INTERVIEWEE** » **Annette Osinga**, project manager for e-Lab (CyberLab) project

“Transferring lab results and ordering lab tests between multiple sites and outsourced labs can create some real challenges,” says Annette Osinga, Project Manager for ICT projects at the Parnassia Group, the Netherlands. “There are simply too many risks when you use paper, fax, mail, etc. Patient data must be both secure and error-free. At the same time, we need to receive results quickly. We knew that a digital laboratory results consultation and ordering system would help us eliminate these risks, but we required a solution that could integrate with seven outsourced labs and our own centres. MIPS, with CyberLab, had the answer, and could provide us with the support needed to achieve our objectives.”





**SAFETY FIRST, FOR PATIENTS AND DATA**

The Parnassia Group of psychiatric care centres focusses on respecting each patient as a unique individual with unique requirements, and leaving no patient behind. A staff of 8000 provide a broad range of inpatient and outpatient care services for all psychiatric disorders and addictions.

In total, the Group has 560 care centres spread throughout the Netherlands, concentrated in three core regions of Noord-Holland, Haaglanden and Rijnmond. These sites share some services, including the management of certain IT projects such as the e-Lab project, which aims to ensure compliance with new Dutch legislation on quality of care and patient safety.

With so many labs, sites, staff and patients, efficiently managing access to results is critical. “When you use a fax or mail to transmit results, it’s hard to guarantee the privacy of the information, and to ensure that the results get to the treating physician quickly. Paper can get lost or left in the wrong place, and physicians need to constantly check on what has come in,” explains Ms Osinga.

Within the Parnassia Group, the paper-based results also created a workflow that was time-consuming for everyone involved. Ms Osinga checks off the steps involved: “First, we received the paper results by fax or mail. Then, the administrative staff had to deliver it to the correct treating physician. Finally, an assistant had to scan the documents and link them to the electronic patient record (EPR).”

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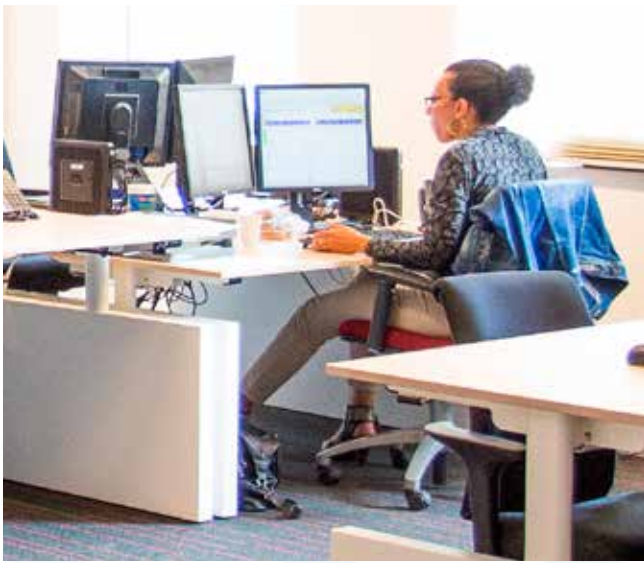


**RECEIVING RESULTS: A MATTER OF TIME**

The Parnassia Group knew that it wanted to implement a system that would allow it to receive results from the outsourced labs electronically, but the labs had different laboratory information systems (LIS), making integration complex.

“Some people in the Parnassia Group were already working with CyberLab and were very pleased with it, so we invited MIPS to present the solution to us,” Ms Osinga recalls. “When they showed us the functionalities, we were confident that we had found the answer for our needs.”

Implementing CyberLab required careful planning and preparation by both MIPS and the team from the Parnassia Group. “We were something of a pioneer in implementing an e-Lab solution, so some of the external labs weren’t ready to connect and had to adapt their own LIS. This meant it took about two years to get the first two labs integrated, but the process has now been established and new labs are being connected much more quickly: a third lab is already up and running, and several more will be soon,” highlights Ms Osinga.



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Annette Osinga



All of the requirements defined by the Parnassia Group were met by MIPS, she continues. The CyberLab user interface is easy to use, and the physicians now receive an alert when their results have arrived. They can also see an overview of a patient’s results from different labs on a single screen and check how they evolve over time.

For administration, CyberLab is very flexible, and extra functionalities can be added as necessary, such as if the lab technician needs to go to a different address than the patient’s home address to get a blood sample.

#### CONNECTED CARE WITHIN THE GROUP

The connectivity of CyberLab is having a big impact, as well: “Not only does it easily connect with the various LIS at our outsourced labs, it’s also linked to our own ADT (admission, discharge, transfer) system, so the patient’s administrative details are exchanged with CyberLab. And we’ve set up an interface between CyberLab and our EPR,” Ms Osinga specifies.

The result has been greater patient and data safety, as well as considerable time and costs savings: “We had an internal auditor check

the e-Lab project’s security measures and patient safety improvements, and the outcome was very positive,” she continues. “In addition, the new workflow saves us a lot of time: we currently receive around 160,000 lab reports annually and we estimate that each lab report takes 3 minutes to scan. Once the e-Lab project has been rolled out to all of our labs, we will be able to save 480,000 minutes, or 8,000 hours, every year. We can then focus that staff time and resources on our core tasks of patient care.”

#### BIG DATA OFFERS BIG POTENTIAL

CyberLab has also now been connected to the Parnassia Group’s data warehouse. “This means we not only have access to all of a patient’s results over time, but we can combine CyberLab data with the enormous amount of data the Group has amassed. This allows us to generate some very interesting research insights. For example, by combining lab results with other data such as diagnoses, in the EPR, we recently checked how a change in medication impacted lab results.”

The Group sees lots of potential in its big data, and expects to work closely with its physicians to explore the possibilities.

#### Solutions

CyberLab offers transparent and secure exchange of laboratory information:

- The **Cyberlab results consultation module** makes laboratory results accessible through an intuitive and powerful user interface.
- The **Cyberlab order entry module** makes ordering lab tests easy, transparent and secure: with just a simple mouse click, the order is already at the laboratory, while the user can monitor its progress.

## Benefits

- CyberLab integrates easily with third-party LIS, as well as with MIPS' own GLIMS LIS.
- CyberLab can be connected to the Group's ADT system and EPR, reducing clerical work and potential errors, and ensuring physicians have access to more of the patient's information.
- By connecting CyberLab to the Group's data warehouse, lab results can be integrated with the big data from the entire Group, and used for e.g. research purposes.
- CyberLab is easy to use for physicians and staff, and adapts to their way of working.
- Physicians receive a notification when results arrive, so they don't have to continuously check.
- No need to deliver or scan results means staff and assistants have more time for other, key tasks.
- Patient data is more secure and private.
- Billing for lab services is clear and traceable.
- Additional functions can be added as necessary.
- Easy to learn: MIPS provided a short training for the e-Lab project team and system administrators on both the results and order entry modules. They train the "e-Lab coaches".
- Labs save considerable time in processing orders.

## ERROR-FREE ELECTRONIC ORDERING

With the integrated results consultation solution well on its way, the Parnassia Group also began digitising its lab ordering, with CyberLab's order entry module. "When you use paper lab ordering forms there are, again, too many risks," comments Ms Osinga. "The paper form that the patient takes to the lab has the necessary barcodes, but these can get damaged, or someone might put a sticker over part of the barcode... Then the patient details have to be entered manually, which can result in mistakes. We knew digital ordering could eliminate these risks, and make both order and patient data automatically available in the lab's LIS system."

But the psychiatric care group uses its own ordering forms, which have been configured to include a selection of tests they frequently require, rather than the standard forms the labs themselves use. Consequently, the LIS systems first had to be adapted to handle the distinct Parnassia Group forms. Once that was solved, the CyberLab ordering solution was piloted, with the first project going very smoothly. The digital order entry will now be rolled out to the entire Rijnmond region.

"Our physicians really appreciate ordering with CyberLab: it's easy to use and when they create

an order, the system guides them through the process. Yet it is flexible for their needs: they can add any additional, relevant information. They have said they consider the system to be 'a little present' from the Group," smiles Ms Osinga.

But it isn't only the physicians who are feeling the benefits: the electronic ordering has simplified invoicing considerably for the centres: "With so many different labs, checking billing could get complex. Now, we can quickly confirm that each invoice corresponds to a specific order, eliminating errors and saving time."

For the labs themselves, CyberLab has brought plenty of advantages, as well. Ms Osinga explains: "The digitised ordering saves a lab about 5 minutes for each order. So if we have 120,000 lab tests per year, consider how substantial a time gain that is for them!"

She concludes: "MIPS acted more like a partner than a vendor for us, and their excellent project management and close collaboration with our own teams kept the implementation going smoothly. We save time and money, but most importantly, CyberLab is helping us to ensure better safety and care for our patients." •

