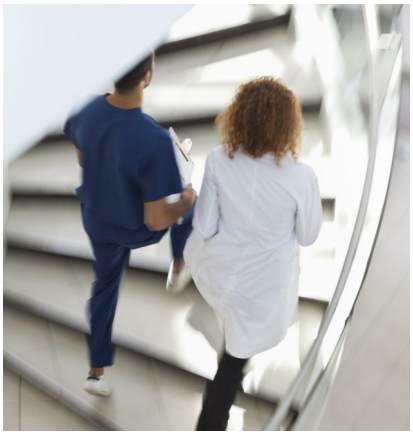
Dutch hospitals show respect for patients' time with real-time Qmatic solution

medisch centrum alkmaar

> Information we receive on all patients – starting with when they take a number and indicate the purpose of their visits – gives us a bird's eye view of the entire process

Hans van Pelt, Head of Laboratories, MCA

When patients can choose any hospital to receive treatment, what do stakeholders do to get them to select their particular clinics? In the Netherlands, this situation is a reality. Almost all health care is public, and citizens can freely choose their preferred medical facilities. In the North Holland province, test labs in two hospitals – Gemini Ziekenhuis and Medisch Centrum Alkmaar (MCA) – introduced a solution that improves patient satisfaction and enables clinics to have better control of their operations.



The situation and point of change

Together, Gemini Ziekenhuis, in Den Helder, and MCA, in Alkmaar, form the MCA Gemini Groep. MCA is the larger, more specialised hospital; it employs about 3,000 and serves about 600,000 residents. Gemini Ziekenhuis employs about 1,000.

Both hospitals had a test lab; patients are sent there for urine and blood tests. Patients could not make appointments. Doctors and nurses referred them to the labs when the patients were in various workup and diagnosis stages. So patients went to the labs when tests must be run. Each lab received about 250 patients daily. Patient load varied extensively during the week as did the types of tests that were run.

This lead to several problems: long waits for patients and difficulties in planning lab operations – particularly staffing.

"I envisioned that we would create a lab operation, which required a minimal amount of patients' time," says MCA's Head of Laboratories Hans van Pelt, who's behind the operation's reengineering. "At the same time, we'd more optimally staff the lab in terms of sheer numbers of employees and necessary skill sets."
A few years ago, lab waiting times were long, and waiting lines were quite chaotic. There was only one line and no way for patients with urgent matters to shorten their wait. Types of tests made no difference.
Some tests required patients to fill out forms with personal information before tests were run. Other tests didn't require this information in advance. The result was a messy, unstructured, slow wait; many patients simply got tired of waiting and went home rather than going through with the tests, which in many cases were important for diagnosis and treatment.

The Results

So how did patients experience the MCA Gemini Groep's labs when the new technology was introduced?

"Basically, patients and employees accepted the new processes extremely well," says van Pelt. "We have continuously evaluated the solutions and adjusted as necessary. During our first major evaluation after six months of operation, we understood that a certain patient group had difficulty understanding how the system worked. Although a small fraction of our older patients have not yet embraced the system, about 95% of our patients like the new technology – buttons, displays, and number slips – which is quite different from what they're used to. A survey of about 130 patients ranked the service as 4.2 on a 5-point scale. Employees are also much happier now."

SOLUTION OVERVIEW

MCA

Gemini Ziekenhuis and Medisch Centrum Alkmaar (MCA) are two hospitals in the North Holland province of the Netherlands. Together, they form the MCA Gemini Groep.

INDUSTRY: Lab Clinic

REGION: The Netherlands

GEOGRAPHY: Two hospitals in the northern part of the Netherlands

THE CHALLENGES

- Chaotic waiting line situation in lab clinics.
- Difficult to tailor service to varying customer demands.
- Difficult to get input for staff planning for different kinds of tests.

THE SOLUTION

- Qmatic Solo and Management Portal.
- System with tickets in conjunction with ability for patients to select what lab tests must be done.
- Digital signage system for patients; the signs indicate their place in line and call them when it's time for them to step forward – in conjunction with nurses calling patients in some cases.
- Statistics and real-time alerts for management and staff.

THE BENEFITS

- Improved patient experience.
- Reduced waiting time.
- Optimised staff scheduling.
- Better work environment for staff.

QMATIC

The Patient Journey

Most patients accept that at some point, they must wait for a service. When they don't know how long the wait will be or where they are in the intake process – or if there even is a process, then they become disappointed with the service.

Customer and Patient Experience Management responds to these problems and many more. It's all about delivering a clear, fair and obvious process. It's about managing expectations and perceptions from before patients arrive at the hospital – all the way through to their treatments. To deliver great health care experiences, the patient journey must be managed; labs in the MCA Gemini Groep hospitals achieved this.

Arrival and waiting at the clinics

"Now that we know what each patient needs, we can optimise all testing," says van Pelt.

When patients arrive, they can now choose among five services from an interactive self service kiosk. For example, patients, who need immediate testing, can press an urgent button, while patients, who must leave blood samples, press another button.

"This system enables us to directly initiate more personalised service later in the process," says van Pelt.

Patients get a number slip that specifies their place in the serving process and a code that indicates the types of tests that should be run. Gender is displayed on large screens.

Two categories describe length of patients' waits: actual and perceived. Perceived length often determines patients' perceptions about hospital services. When MCA Gemini Groep patients select the type of test they're waiting for, then this signals to them that they have entered an efficient process that will quickly yield results.

"Patients, who must submit simple urine samples, typically have less patience with long waits – compared to persons whose blood is collected for extensive workups," van Pelt explains. "So we can use information from patients' selections when they take their numbers to quickly prioritise ways in which varying cases should be managed."

In general, MCA Gemini Groep staff decided that a test should take no longer than 20 minutes after a patient has requested service. Ideally, an urgent case should take no more than 15 minutes. This isn't entirely easy to implement, because some tests require that a patient's name is called twice – once for providing various forms and instructions on how to complete the forms and then for taking the test.

In addition, patients can be called for testing in two ways: (i) nurses call patients using their waiting list numbers or (ii) numbers are displayed on screens that indicate where patients should go.

Serving

Well-prepared staff members greet patients when they enter the lab area. Nurses already know which tests should be administered and get right to work. This streamlines the entire intake process.

It's a global truth that staff is a hospital's highest cost. So human resources must be used efficiently. In parallel, when care providers must deliver excellent face-to-face patient experiences, they must have the right staff in the right place at the right time. Staffing capabilities, which indicate the number of necessary employees, where they're needed, and when they're needed, provide two benefits: optimal staff use and ability to deliver good service.

"Information we receive on all patients – starting with when they take a number and indicate the purpose of their visits – gives us a bird's eye view of the entire process," say van Pelt. "We get real-time signals when the wait will be too long, so we can rapidly deploy additional resources. As mentioned, a normal test can't take more than 20 minutes and within that time span, 10 minutes is an acceptable waiting time before actual testing starts. When 21 minutes have passed and a patient has not received help, then the system transmits a computer alert into the lab so that more staff can be added.

Managing

Patients like to manage their time well; this challenges care providers who want to meet patients' demands – yet need to balance demand with available resources. Consequently, providers must understand the full picture. Who is working right now? Who is available? What skill sets are necessary? Accurate answers enable care providers and care givers to really understand busy times and quieter times within their facilities. The system in use within the MCA Gemini Groep provides input for long-term planning. Historical data is used to detect patient-load patterns and thus provide management with valuable decision-support information.

"We see how patient load varies across the work week with larger patient pressure earlier in the week, and we can also see variations across the year," says van Pelt.

The MCA Gemini Groep monitors the how need for specific skills varies at various times, which provides valuable planning input.

Hans van Pelt, Head of Laboratories, MCA

> "Now that we know what each patient needs, we can optimise all testing"
>
> **Hans van Pelt, Head of Laboratories, MCA**

QMATIC

©2014 Q-Matic AB. All rights reserved. Qmatic and products and services as well as their respective logos are trademarks or registered trademarks of Q-Matic AB. All other company names, products and services used herein are trademarks or registered trademarks of their respective owners. The information published herein is subject to change without notice. This publication is for informational purposes only, without representation or warranty of any kind, and Qmatic shall not be liable for errors or omissions with respect to this publication. The only warranties for Qmatic products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting any additional warranty.