

Microbiology Laboratory, Hospital Infanta Margarita de Cabra, Córdoba, Spain

# The quest for efficiency at the Hospital Infanta Margarita

GLIMS and CyberLab support a microbiology laboratory to improve workflow, speed up delivery and control infection

**INTERVIEWEE** » Dr. Carlos Plata Rosales, Doctor of Pharmacy, Clinical Microbiology Specialist



“Microbiology laboratories have their own idiosyncrasies, so they need computer systems that fit their specific needs,” says Dr. Carlos Plata Rosales, Head of Microbiology at the Hospital Infanta Margarita, a public medical centre in Cabra, Córdoba (Spain). The Microbiology lab, with two microbiologists and five technical specialists, is part of the hospital’s Laboratory and Haematology Clinical Management Unit, which also encompasses other specialised laboratories, such as clinical analysis, haematology and immunology. “In the beginning, there were no specialised systems for microbiology,” recalls Dr. Plata Rosales, who has worked in the lab for 20 years. “The programs we used made us feel outdated. But now that we are using the MIPS systems, that feeling is gone.”



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#### THE NEED FOR CHANGE

Some years ago, Dr. Plata Rosales realised that his team needed a computer system that met his lab's particular requirements: “The Microbiology laboratory works differently than the other laboratories, which have a more straightforward exam request process. For microbiology, apart from the request, physicians send specific information regarding the kind of analysis they need. They may also ask later for additional exams or to extend one particular exam. That's why the communication is so important and why the system the lab uses must be open. Not all

computer programs permit this flexibility.” After trying out different software and visiting other hospitals to see what systems they used, Dr. Plata Rosales found what he was looking for: MIPS' GLIMS laboratory information management system and CyberLab electronic order entry and result reporting module. “Our workflow is a lot faster and more efficient now; the systems are tailored to the Microbiology lab's needs and we can handle more specific information,” Dr. Plata Rosales comments.

Furthermore, it is essential to have an alert system in the Microbiology laboratory



that reports infection outbreaks, including for nosocomial infections, in real time to epidemiologists and clinicians. GLIMS' 'zero delay' in the transfer of results allows the early establishment of necessary isolation and control measures for the prevention of such outbreaks.

**COORDINATION, THE KEY TO QUALITY HEALTHCARE**

The relationship between the Microbiology lab and the physicians is essential. Everyone from primary healthcare physicians to specialists requests exams from the lab, which must be sent to them as quickly as possible. "With GLIMS and CyberLab, we have achieved a quick and reliable circuit of alert notifications. We have also attained bidirectional communication between Microbiology and the clinician, as well as an immediate notification of results," asserts Dr. Plata Rosales. The lab self-manages the requests for exams it receives with the GLIMS system, which also allows it to use the same general patient identification number as the rest of the hospital. After the exam is complete, GLIMS sends the results to CyberLab, which doctors can access 24 hours a day. "They access it between 80 and 90 times a day. In primary healthcare, for example, CyberLab is very popular," adds Dr. Plata Rosales.

**NO TIME TO WASTE!**

"The program has a series of labels, or instructions, which guide the technician step by step; this is particularly helpful with new staff," continues Dr. Plata Rosales. "The lab professionals do not have to spend too much time showing the new technicians how the system works: they quickly learn how to use it themselves. That means the lab staff can focus on their own tasks."

Dr. Plata Rosales also appreciates how GLIMS can be adapted to the lab's needs. "MIPS has been working with us from the beginning to adjust the program, modelling it and introducing improvements as the lab's needs change. So far, we have been able to adjust the system to new requirements. And I can assure you that it has been worth the effort."

Antonio Muñoz, Commercial Manager of MIPS Ibérica, agrees: "We have been improving it together; sometimes the lab asks for a change, and we work on giving them the best solution. Other times, we propose enhancements that could improve the lab's day-to-day operations."

**INFECTION CONTROL**

In the Hospital Infanta Margarita, as in all hospitals, controlling infection risk is critical,



**GLIMS for Microbiology**

- Full traceability of cross-infected patients.
- Dedicated microbiology work screen that accurately reflects the lab workflow and Standard Operating Procedure (SOP).
- Intelligent selection system when specifying criteria, including the identification of a double or nosocomial infection.
- Automatic addition and/or reporting of the use of particular medium plates, diagnostic tests and antibiograms.
- Customised interpretation of antibiogram results.



and here as well, the GLIMS capabilities play a role. “The Microbiology lab automatically generates epidemiological data via intranet (MIPS’ CyberLab). Preventive Medicine immediately receives information, via e-mail or mobile phone, on alerts originating from Microbiology. It can then rapidly generate alert reports for the Andalusian Epidemiological Surveillance Service. In situations of outbreak, as in the case of Influenza A (H1N1),

### Customer benefits

- Fast exchange of information between the lab and the clinicians, resulting in quicker patient care.
- Increased efficiency, which is of particular importance in infection control.
- Close collaboration between MIPS and the client, helping to adapt the system to every lab’s specific needs.

these alerts have also been directed towards the Medical Management, any involved services, the Infection Commission and the Primary Healthcare staff,” explains Dr. Plata Rosales.

### NO MORE DOUBLED TESTS

GLIMS also allows the lab to take advantage of some of the particular aspects of microbiology. “There are microbiology results that don’t vary throughout a certain period of time; ten days, for example. Sometimes we receive an analysis request, and then 24 or 48 hours later, we get an identical request for the same patient. We know the result is going to be the same in both cases. GLIMS lets us block the second petition. Once we have the results of the first request, these then also are sent to the second petitioner,” says Dr. Plata Rosales. The hospital saves time and public healthcare resources, which is especially important in the current economic climate. •

### CyberLab

- Definable module for requesting lab exams.
- Customised and intuitive module for the exchange of results.
- Seamless integration with third-party systems.
- Personalised security to support primary and secondary care users.

