

Dear colleagues,

The Center for Healthcare Operations Improvement and Research (**CHOIR**) at the University of Twente announces the 29th talk in the **ORAHS International Seminar Series**.

The ORAHS International Seminars are planned via MS Teams in the late afternoon (Europe), morning (US), or evening (Asia/Pacific) and are part of the [EURO Online Seminar Series](#).

On **27 May 2025, at 16:00 (CEST)**, Dr. Marta Cildoz and Professor Fermin Mallor (Navarre, Spain) will talk about “*Make an impact: Engaging hospital managers to make decisions supported by simulation/digital twin models.*”.

Please save the date and register for this seminar here:

<https://events.teams.microsoft.com/event/ada6ae38-bec0-461e-ad30-0a18a6152cb8@723246a1-c3f5-43c5-acdc-43adb404ac4d>

Abstract: Building strong collaborations between research teams and healthcare decision-makers is key to driving meaningful change in hospital management. This talk will showcase how our research group has established a stable partnership with the regional health administration and the management of the main public hospital in Navarra, Spain, ensuring that our proposed solutions are either directly implemented or used to support strategic and tactical decision-making. We will explore real-world healthcare challenges we have tackled using simulation-based models, including their evolution towards digital twins designed for tactical and operational management. A key focus will be on our ongoing work to reduce waiting times for specialized medical care—particularly in traumatology—where our findings have already justified significant structural changes in patient flow, IT systems, and healthcare management. Along the way, we will also highlight previous projects on optimizing emergency department patient flow, ICU capacity planning, and forecasting needs during the COVID-19 pandemic. This presentation aims to inspire researchers to engage with healthcare stakeholders and leverage modeling techniques to create a real impact on decision-making.

Bio: **Marta Cildoz** is an Assistant Professor in the Department of Statistics, Informatics, and Mathematics at the Public University of Navarra (UPNA), and **Fermin Mallor** is a Full Professor in the same department. Both are members of the q-UPHS research group, which focuses on the application of operations research techniques to healthcare management. Their research integrates simulation, optimization, and data-driven analytics to improve decision-making in healthcare, with a particular emphasis on patient flow management, resource allocation, and workforce scheduling. They have collaborated with institutions such as the Government of Navarra’s Health Department and the University Hospital of Navarra, developing practical solutions that support strategic and operational decision-making. Their work includes the development of digital twins and simulation models to optimize healthcare services, including ICU bed management, emergency department planning and operation, and medical staff scheduling. They have participated in multiple research projects, funded by national and European programs, and have published extensively in high-impact journals. Their research not only contributes to theoretical advancements in healthcare operations research but also has a tangible impact on real-world healthcare management and policy.

More information about the speakers can be found here: <https://www.unavarra.es/quphs>

For more information about our seminar presentations, please follow this link:

<https://www.utwente.nl/en/choir/research/ORAHS-International-Seminar-Series/>

We look forward to seeing you soon and often in the ORAHS International Seminar Series.

CHOIR Group
University of Twente