Telefónica and the Germans Trias Hospital develop a world-first pilot for training in robotic surgery: virtual inmersive operating room

Objective: Perform collaborative surgeries and training/proctoring sessions, remotely, in operating rooms equipped with the da Vinci surgery robot, integrating the control view of the robot and the complete experience of the robotic system within the immersive 3D mSurgery platform, which is already part of Telefónica's commercial portfolio.

Description: Telefónica, with its network capabilities (5G and fiber) and cloud computing (Edge Computing), enables end-to-end retransmission of audiovisual signals up to 4K from the operating room to devices such as VR glasses, tablets or a Portable PC, so that surgeons, experts or resident students can visualize what is happening in the operation, speak with the medical team or even make graphic indications, in real time and completely independent of their location. It is a technological challenge to provide the connectivity needed to support the bandwidth of the different video signals, maintain low latencies and make the experience as fluid as possible, as well as guarantee access to the virtual operating room at 50, 100, 200 concurrent surgeons who connect remotely without loss of image quality, and without interruptions in two-way communication.

Telefónica has collaborated with the German Trias i Pujol hospital in its operating rooms, with its bariatric surgery team, with Abex (marketer of the da Vinci), and Vectorpipe (developer of mSurgery), to validate the solution in four real operations. This pilot project was presented within the framework of the XXIV National Surgery Meeting that took place last October 24-27, 2023 in the Auditorium of the Alicante Provincial Council.

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Germans Trias i Pujol Hospital
Institut Català de la Salut

mSurgery

abex EXCELENCIA ROBÓTICA