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PITAL: Regulating Patient Flow

Participantes

Pilot service: Hospital de Temuco, Claudio Vega, Sub-Director

Doctors: Dr. Nicolás Rojas, Hospital de Temuco Emergency; Dr. Luis Enberg, President of the Chilean Society of Emergency Medicine (SOCHIMU); Dr. Allan Mix, Hospital Clínico de la PUC.

Engineers: Vladimir Marianov, Alejandro Cataldo, Jorge Vera, Gustavo Angulo, José Tomás Marquínez.

Araucanía South Health Service (SSAS)

Development

Each time an emergency physician has to refer a patient to another hospital or clinic, or even within the hospital itself, it requires a long time to search for places where resources are available to accept that patient.

Until now, critical bed information is only officially known once a day through the Central Bed Management Unit (UGCC). Since the resources are occupied and vacated during the day, the process of searching for space is carried out by phone calls from the doctor to those in other units, hospitals or clinics who may have the required resource until they find it and agree to transfer the patient. This process requires quite a bit of time and effort on the part of the doctor, time and effort that would be better used taking care of the patients who require it.

A group of academics and students from the Pontificia Universidad Católica de Chile, together with the [Chilean Society of Emergency Medicine \(SOCHIMU\)](#) and the [Complex Engineering Systems Institute \(ISCI\)](#), have wanted to support the management of doctors and, ideally, of the UGCC. To do this, they have developed an application that allows users to find out online the availability of ICU beds, ICUs, invasive and non-invasive ventilators as they become available or reduced. Its name is 'Pital', which means 'hospital' in the native Mapudungun language.

This application is currently beginning to be officially used in the Araucanía Sur Health Service (SSAS) and the developers hope that the initial operation will allow the application to be perfected.

The group is led by Vladimir Marianov, professor at the School of Engineering and researcher at ISCI, who indicates that his hope is to be able to extend the use of this free application to the largest possible number of Health Systems in Chile.

Once the current application is consolidated, the next step is to connect it with the Emergency Medical Attention Service (SAMU) so that it can immediately determine the best hospital or clinic to transfer a patient to, thus reducing the number of transfers later.

The medical team is made up of doctors Claudio Vega and Nicolás Rojas from the Dr. Hernán Henríquez Aravena Hospital in Temuco, who are leading the development of the application in the field, Dr Luis Enberg, President of the [Chilean Society of Emergency Medicine \(SOCHIMU\)](#), and Dr. Allan Mix, Director of the Emergency Service of the Félix Bulnes Hospital. The application was designed by the group and put into practice by [Professor Gustavo Angulo](#).