# H@H hospital at home

#### Reinvent eHealth.

## FAQ's

#### What is the H@H hospital at home system?

The H@H hospital at home eHealth system is a web based telemedicine system that guarantees continues care for de-hospitalised patients that are in non life threatening conditions.

H@H hospital at home system provides for the monitoring of various physiological parameters and oxygen therapy in the comfort of the de-hospitalised patients home, ensuring interaction between the patients and the medical professionals via video calling without the need of the patient going into hospital.

It has been conceived and designed with the aim of increasing the number of de-hospitalisations of patients, thus improving the quality of the health service thanks to the reduced nett time and costs of hospitalisation.

The system combines the proven validity of telemedicine systems and the remote monitoring of vital signs, also giving the patient the opportunity to request a consultation with the healthcare provider.

The need to reduce the health systems costs requires a modification of the consolidated operative models while limiting, where possible, the degradation of the quality of services offered.

#### What does H@H hospital at home system do?

The principle of the H@H hospital at home system is based on the concept of protected de-hospitalisation. This concept provides for a significant decrease in the number of beds occurried in hospitals by patients suffering

number of beds occupied in hospitals by patients suffering from chronic diseases, resulting in a reduction of more than 41% of the hospitalisation costs.

Added to this there is optimal clinical management of the de-hospitalised patient that is monitored 24 hours per day.

#### What is the H@H hospital at home system composed of?

The **H@H** hospital at home system is composed of a home device and a Service Centre set up to work around the patient, the health service and service centre.

The system supports internet communications, allowing for the transfer of patients vital signs data and for video calls between the home device and the Service Centre, and thus playing an important role in the coordinating and monitoring the performance of the health care.

This makes it possible to connect several home devices to the dedicated server, which can be physically located in the hospital or in an office dedicated to medical personnel and paramedics.

The **H@H** hospital at home device is similar in size and shape to that of a bedside table and is equipped with an articulated arm for comfortable use in different postures: lying in bed, sitting, in a wheelchair or standing.

The device is mobile and comes equipped with wheels and a handle for gripping and handling, which can also be used as a towel holder.

The sockets for the medical gas and the connection points for the medical/therapy equipment are positioned on the sides of the device so that they are easily accessible for the patient and the caregiver.

Inside the device there is an oxygen concentrator that provides medical gases directly at the patient's home, resolving the problems and risks associated with the administration of O2 from a cylinder, such as its size, the risk of explosion and the short duration of the cylinder.

The stud front of the air intake allows for easy removal of the filters for cleaning, even by unauthorised personnel. The Service Centre plays a key role in monitoring, and in particular detecting critical situations of patients: the moment a risk situation is detected, the Service Centre operator actives remote medical procedures and prepares the intervention in situ.

The interactivity between the video call and monitoring, including continuous monitoring, of the patients vital signs allow the Service Centre operators to keep any identified patients status under review, identifying any variations on the physiological parameters and providing real-time clinical intervention to stabilise the status through the activation of the therapeutic equipment available at home.

## What are the innovations introduced by the H@H hospital at home system?

The H@H hospital at home system offers an unprecedented opportunity for innovation in the field of telemedicine by allowing for a reduction in diagnosis times (therefore early identification of the required therapies), tests and home to healthcare facility transfers.



These extraordinary advantages result in a guaranteed improvement in the quality of life, especially for elderly patients and/or patients with impaired mobility.

The system is a synthesis of innovation and technology. A home device - similar in size to a bed stand - continuously monitors the physiological condition of the patient, and this is connected to a Service Centre, the monitoring station through which the healthcare provider can remotely monitor the patient. These two instruments are interconnected via internet, allowing data to be safely and conveniently exchanged in real time.

In this way, the H@H hospital at home device allows you to simultaneously monitor physiological parameters such as SpO2 (oxygen saturation), heart rate, ECG (electrocardiogram), internal and external body temperature, pressure and respiratory rate.

The H@H hospital at home device offers caregivers touch to call possibilities, allowing them to video call the patient in real time.

This interaction between the diagnosis and real time therapy (oxygen and intracavitary vacuum therapy) is a determining factor in terms of innovation.

As well as being able to monitor a patient's clinical condition, you can remotely activate/deactivate any therapy devices installed on the **H@H hospital at home**device.

To summarise the features that make the **H@H** hospital at home system highly innovative:

- continues care for de-hospitalised patients that are in non life threatening conditions;
- real time and constant monitoring of vital parameters;
- remote oxygen therapy and mucous vacuum, all in the comfort of the patients home.

### What are the advantages of using the H@H hospital at home system?

The technological innovation of the H@H hospital at home system not only guarantees efficiency and rapid intervention, but also remarkably contributes to improving the patient's well being and their emotional and psychological condition. The care and attention whilst using the H@H hospital at home system is comparable with those received during hospitalisation in a normal healthcare facility.

Using the H@H hospital at home system guarantees an improvement in the health care services quality by reducing the times and costs through new methods and technologies.

The advantages of using the H@H hospital at home system are as follows:

- decreasing the rate of hospitalisations
- significantly reducing hospitalisation costs
- reducing the hospital re-admittance rate as a result of relapse after hospital discharge
- improving the patients quality of life

Having a patient de-hospitalised and then monitored directly from his home is a considerable advantage in terms of quality of life; in this way the patient benefits from their own personal comfort and the support of their family members, who are no longer are forced to travel, often at great expense in terms time and money.

#### Who is the H@H hospital at home system for?

The **H@H** hospital at home system can be used for the following patients:

- in a permanent vegetative state;
- cardiac patients;
- diabetics;
- long-term care;
- frail elderly;
- COPD (chronic obstructive pulmonary disease) also carriers of severe tracheostomy;
- tetraparetic for cervical spinal trauma;
- with an outcome of serious brain diseases (stroke and/ or bleeding in the brain) with severe neurological damage;
- with ALS (Amyotrophic lateral sclerosis);
- with final stage of cystic fibrosis;
- with severe heart failure with New York Heart Association (NYHA) Class 4 (terminal phase, severe limitations, symptoms even at rest, for the most part constrained to bed);
- permanently bedridden, with continuous oxygen therapy with or without mechanical lung ventilation.

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