



Heimdall 4U

Background

The process of caring for and attending to the needs of residents at residential care homes and ensuring constant supervision at all times puts huge pressure on the available resources in such facilities.

- > Safer and more punctual service
- > Less burden on staff
- > Strategic data for management

Constant and customisable monitoring of:

- > Biomedical parameters
- > Hygiene and quality of life
- > Displacements and movement
- > Environmental parameters
- > Integration with other social and health services i

Through a network of state-of-the-art digital devices and a tailor-made IT platform, the Heimdall 4U system makes it easier to monitor the comfort and safety of the residents of a residential care home throughout the day as well as supporting the work of the staff.

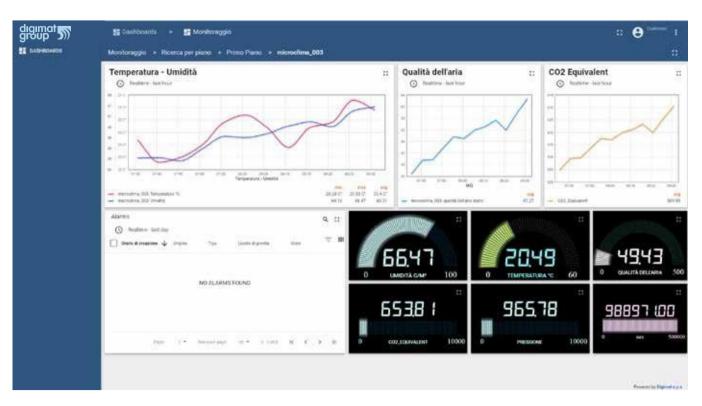


Objectives and results

The system detects any anomalies or problems in the rooms or with the patients in real time and immediately reports them to the service staff.

This makes it possible to:

- improve the quality of life for the guests as well as giving peace of mind to their families, and enhance the service provided to the elderly in terms of punctuality and safety
- Lighten the workload of the staff, allowing them to attend to more guests at the same time and to concentrate on the more complex aspects of care;
- > Collect data and store useful information in order to better understand priorities and refine procedures of intervention.



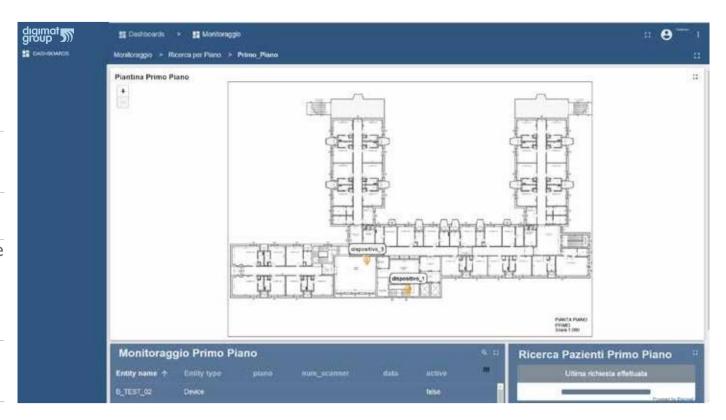


Monitoring:

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I parametri monitorati sono flessibili e personalizzabili, ma possono ad esempio comprendere:

- > **Biomedical parameters** (body temperature, heart rate, blood pressure, blood sugar, body weight, etc.).
- > The user's hygiene and quality of life (nappy wetness, sleep/wakefulness etc.)
- Movement (geolocation, distance and route mapping) and various other types of movement (fall alarm, movement of bedridden guests, access to unauthorized areas etc.)
- > The spaces and environments of the facility (room temperature, humidity, pressure, air quality, smoke and gas etc.)
- > Integration with other social and health services (personal care, nursing care, meals on wheels)

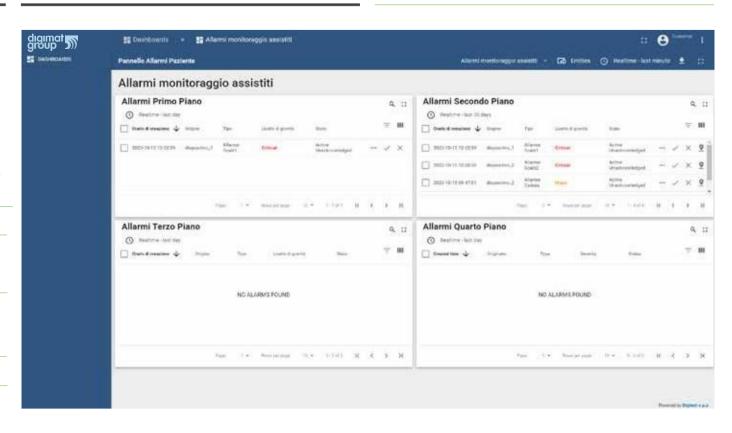




A customised system

Digimat designs and implements the entire system 'tailor-made' according to the specific characteristics and requirements of each facility. Such customisations could include:

- > Interoperability with software already in use in the facility (e.g. medical records):
- > Specific alarms (e.g. falls);
- Monitoring of particular elements (e.g. movement of bedridden guests, specific parameters);
- Digital mapping of internal and external environments, with the ability to define unauthorised areas;
- > Privacy management.



All parameters on one dashboard

Each monitored element can viewed when glancing at a dashboard that forms the basis of the graphic interface. The

most important parameters can be selected and tailored to the specific needs of the facility and/or individual user. This allows the general status of each user to be displayed quickly and confidently, with the possibility of selecting different elements for further and more in-depth analysis.



Home assistance

for assistance and care needs

These same features are also guaranteed to meet the needs of facilities looking after elderly and partially self-sufficient users, who live in their own homes.

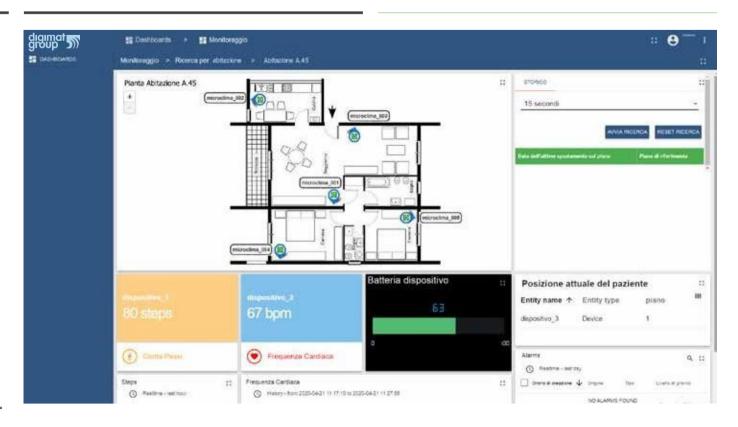
The same sensors and platform (featuring the same capabilities) allow environmental monitoring (smoke, gas, temperature, etc.) and personal parameters (biomedical, but also hygiene or sleep/wake-related data) in real time and remotely.

In addition, a system of cameras and monitors can be added to allow the elderly to not only see and talk to the users but also to ask for assistance in a simple and direct way.

Integration with other social and health services

The platform is also able to manage and integrate into the interface of any additional services, such as:

- > Personal assistance;
- > Nursing care;
- > Meals on wheels;
- > Out-of-home transfers (e.g. for hospital appointments).





Remote supervision by our medical staff

Upon request, Digimat can provide the support of specialised medical staff to ensure 24/7 remote monitoring.

By monitoring the available parameters, our specialists will be able to check and identify

emergency situations and then proceed to alert the facility staff or emergency personal (in the case of home care) in real time.

System components

- > Sensors and IoT central unit
- > Software and cloud database
- > Interface (web and smartphone App) for control and management
- > Extremely simple, pre-configured installation kit

Heimdall 411



Digimat's portfolio

The Digimat Group is recognised as one of Italy's leading innovation centres and its strength lies in its ability to transform research activities into concrete products and useful services for companies.

Drawing on the strength of our experience and the algorithmic expertise developed in aerospace missions, we supply and integrate the latest and most cutting-edge advanced technological systems.

We are passionate about offering our knowledge, culture of innovation and technological infrastructure to care homes in order to create customised, creative, reliable and safe solutions that have a proven track record of success. In fact our work has already improved the quality of life of guests in over twenty residential facilities in Puglia and Basilicata.



