



NDILIFE
advanced digital life

INSIGHT INSIGHT INSIGHT

HOW DIGITAL REVOLUTION IS CHANGING THE MEDICAL PRACTICE

THE BACKGROUND

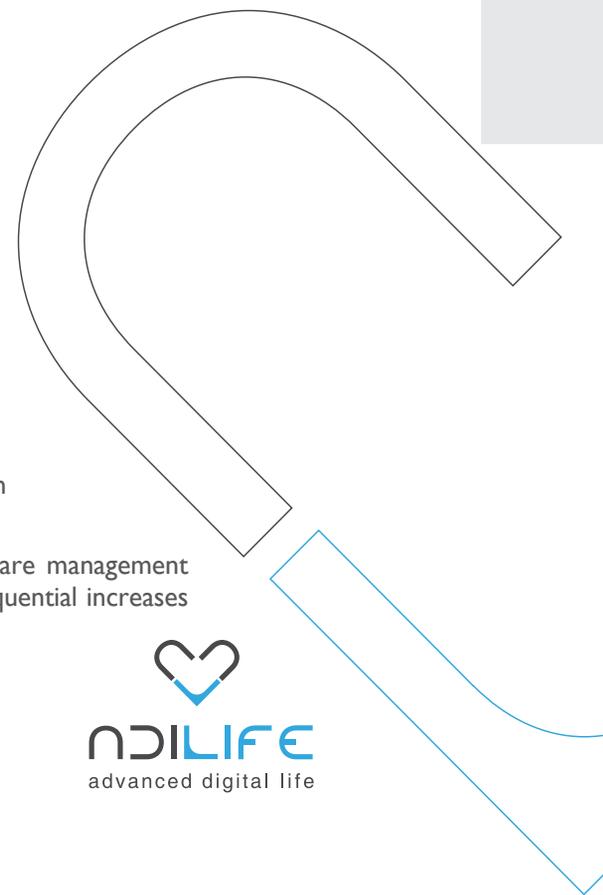
The demographic and socio-political phenomena of our era is strongly plying a formidable pressures over the worldwide Healthcare system. Unavoidable constrains such as:

- Population aging, longevity, active aging, multi pathologies.
- The economic/social environmental and cultural changes resulting from increasing globalization.

Such scenario requires prompt answers to avoid that population healthcare management becomes problematic by the predicted severe increase in costs and consequential increases of the number of services required and their complexity.

THE CHALLENGE

Telemedicine rises from the need to share limited medical resources or to share them in a large and low-demand area; however, the focus has always remained on the valorization of resources and cost saving. Today the challenge is to keep alive the strength of these features, espousing it with the increase of the potential of care, made possible by the overwhelming processes of digitization that inevitably involve our technologies. In addition, the further challenge is represented by the need characterizing the awareness of the "digital patient": the patient is the center of all processes, the power of empowerment resulting from digitization must be completely in its own right and to the advantage of his treatment process. We will move from reactive medicine to a proactive, participatory, preventive and personalized one, aimed at preventing, even before curing with considerable benefits in terms of costs and time. Connected health is when digital technology optimizes spending and improves population healthcare as a whole, not only to monitor disease, but much before in the prevention and treatment phase.



THE SOLUTION

Welcome to **ADiLife**, the innovative digital Telemedicine platform that collocates the patient/user at the center of the cure process, providing the doctor and the caregiver with the most advanced digital measurement, diagnosis and treatment tools, keeping the promise to integrate with each new diagnostic technology on the market.

WHY DOES THE MODERN HEALTHCARE NEED ADILIFE?

Because it enhances and makes the healthcare process more effective, regardless of where the patient resides (hospital, clinic, residence, home, traveling ..).

Because it provides clinician with the tools he needs to manage the medical process (measurement of vital parameters, medical history, treatment plan, statistics and trends..).

Because it gives to the patient the necessary tools to become protagonist of his therapy, conscious of his healthcare process, providing him with the information he needs and wants.

WHAT IS ADiLife?

The Connected Health Platform that puts the patient at the center of the care process.

WHICH PROBLEMS DO WE SOLVE?

We eliminate the distance, we reduce the response times, we bring the doctor face to face with the patient, we give the patient a point of reference for his health regardless of time and space.

ADiLife more specifically meets the following needs:

- Functional and technological support for remote medical services management and health care assistance;
- Remote and continuous monitoring of vital parameters and personal health recording;
- Connection to centers of excellence for teleconsultation or second opinion.

ADiLife accompanies the user throughout his life, adapting to his needs and taking care of his wellness with extreme simplicity and immediacy.

ADiLife uses a series of modern medical and home automation devices, suitable for every age and every need of assistance, wearable, non-invasive and easy to use.

ADiLife can be applied over a wide range of scenarios from the simple self-measurements of aerobic parameters, prevention and lifestyle, monitoring of chronic patients, to remote assistance of active ageing elderly or long-term patients and weak persons.

WHO DO WE ADDRESS?

Our Clients are Organizations (public or private health structures, Insurance and Mutual, Companies...) and Private Users (patients suffering from chonical diseases, general practitioners, specialists, clinicians, or simple individual users willing to keep under control their lifestyle and well-being ...).



HOW DO WE DO IT?

Making available to our customers a modern connected healthcare multi-utility platform, capable of:

- Monitoring a wide range of vital parameters through the use of wearable and wireless biomedical devices;
- Taking care of prevention controlling vital parameter reference thresholds;
- Allowing medical opinions exchange between professionals or video collaboration including medical images sharing.



ADiLife also provides a new mode of interaction and communication with the user through CELESTE, a virtual assistant able to fulfill the requests and needs of the user. Based on NLP (Natural Language Processing) interacts to queries with a natural voice. The platform also includes a part of artificial intelligence able to support the operator and / or the user for self-assessment of the various symptoms suggesting the most appropriate behavior and directing the user to the most appropriate specialist or booking a visit. The combination of both tools allows CELESTE to accompany the user through a broad base of medical knowledge including symptoms based on tens of thousands of diagnoses.

KEY FEATURES

VITAL PARAMETER MONITORING

ADiLife integrates a wide range of certified medical devices. It is possible to monitor a great variety of vital parameters, which can be selected in a simple and intuitive mode by the user, caregiver and operator according to the needs. In the same simple way parametric thresholds can be set and in case these are exceeded a messages or an alarm signals, will alert the users and his tutor, using different transmission media (SMS, phone call, e-mail, social networks ...). In addition the patient will always be assisted by CELESTE taking advantage of ADiLife artificial intelligence, in the form of a chatbot. CELESTE will always be available to answer all the questions asked in natural language (eg: "What is the value of my blood glucose?" "when should I take the next measurement?"). All data will also be available in the user's Personal Health Record accessible from the most popular media today on the market (PC, Smartphone, tablet). The measurable parameter include:

- Glucose meter
- Oximeters
- Multiparameter (HR, BR, HRV)
- Electrocardiography
- Activity
- Blood pressure
- Temperature meters
- Weight Scales
- Posture management
- Behavior Mapp Reporting

SECOND OPINION, TELEVISIT & TELECONSULTING

ADiLife offers an advanced webRTC Video Call Center system that integrates video communication and collaboration in an agnostic way to any operation systems (Windows,Android, IOS), allowing smooth and intuitive communication between the users of the platform: doctor, patient and specialist, and any actor in the healthcare treatment process.

ADiLife makes available to all users a series of collaboration tools allowing additional functionalities such as displaying and sharing reports, medical records, images in all formats. Tools which facilitate online second opinion by sharing all the necessary documentation and harmonizing the doctor / patient relationship.

In addition the video systems allows multivideo calls and document /file sharing among the actors therefore it's possible to show medical images, DICOM and reports in the concept of advanced medical platform.

- PATIENT MANAGEMENT (ELDERLY, FRAGILE, CHRONIC)
- BEHAVIOUR ANALYSIS
- MEDICAL HISTORY MANAGEMENT
- PRESCRIPTIONS / POSOLOGIES MANAGEMENT
- THERAPEUTIC SCHEDULE
- CLINICAL DIARY
- AI BASED FIRST-AID (IBM WATSON POWERED)

TECHNICAL FEATURES

ADiLife platform can provides services in SaaS mode (SW as a service) or it can be installed, administered and managed directly by the customer at his premises (mutual, insurance, fund, clinic, hospital..).

The platform main components are:

- 1 The mobile App for the patient/ caregiver / nurse.
- 2 Gateway for vital parameter data gathering (TV set top box or mobile terminal).
- 3 Data Server for user monitoring, communications, data storage and analytics.

In addition:

- Highly scalable architecture (competing consumers pattern via RabbitMQ) and open (PaaS).
- WEB component with UI Responsive based on ANGULAR framework.
- Microservice architecture with REST API.
- Additional integration of biometric, environmental and behavioral sensors.

