eHealth HUB Smart Guides

FIND YOUR WAY THROUGH THE EHEALTH MARKET

Solution Match Report

"Remote monitoring / Symptom reporting solutions for use in pediatrics"





The eHealth Hub project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No727683





"Remote monitoring / Symptom reporting solutions for use in pediatrics" SOLUTION MATCH REPORT







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We are here to support European eHealth businesses

<u>eHealth HUB</u> - European eHealth business support is the new EU-funded initiative, cross-border and focused on the digital health vertical. eHealth HUB's goal is to provide high-quality business-oriented services tailored to the needs of European eHealth startups, SMEs and stakeholders. We use a demand-driven approach to promote new business and collaboration opportunities for SMEs and key ecosystem stakeholders including healthcare provider organizations, investors, insurers, pharma and MedTech.



info@ehealth-hub.eu www.ehealth-hub.eu

From Business Modelling to Regulatory advice: exploit our services

eHealth HUB offers FREE services to support European eHealth SMEs, healthcare providers and ecosystem stakeholders on the following key areas:

Business modelling



Business model clinic One-on-one Support

The Business Model Clinic supports the best promising entrepreneurs and startups offering personalized coaching on business proposition, customers and go-to-market strategies.



Lean Startup Academy Learn to be Lean

The Lean Startup Academy provides eHealth SMEs with the opportunity to mature their business by systematically testing their ideas against the market.

Access to private finance



Investment readiness training & pitch Make eHealth SMEs ready to make their business

eHealth Hub Investment Readiness prepares European early-stage startups and SMEs to approach and collaborate with investors.



eHealth Hub Platform The place to be for eHealth SMEs and Investors

The eHealth Hub Platform features SMEs, investors, healthcare organizations, legal and regulatory service providers. By registering, health stakeholders can get easily in touch with each other.

Commercialization



Solution Match Start form your need, ask European SMEs for a Solution

Solution Match supports healthcare providers, insurers, pharma or medtech companies looking for a concrete digital health solution to be implemented in their organization.



eHealth Roadshow Pitch your solution, Jump into European market

eHealth Roadshow offers an opportunity for selected eHealth SMEs to expose their digital health solutions in front of a Committee of key stakeholders in the eHealth European market.

Legal issues & Regulatory and reimbursement guidance



Legal Support A compass to navigate legal services through Europe

eHealth Hub Legal Network offers good quality, affordable legal advice for eHealth SMEs as well as free workshops detailing current legal issues of eHealth SMEs interest.



Regulatory Guidance Regulatory and Reimbursement Guidance for eHealth SMEs

eHealth Hub Regulatory Network helps European eHealth SMEs to be compliant with regulatory requirements and develop reimbursement strategies across the European Union.

Let's find the best way to work together



Sylvie Donnasson, eHealth Hub partner and eHealth Hub team "Most healthcare providers are looking to implement digital health solutions. However, the market is constantly evolving and finding the perfect match to a concrete and very specific need is challenging. Solution Match is the eHealth Hub personalized service for health care providers interested and ready to implement a digital health solution, linking the economy to innovation. More generally, our role is to best serve entrepreneurs on their business journey by creating a value chain and proposing a combination of services. Your business is in digital health? Contact us, we will find the best way to work together".

Solution Match

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One of the services offered by eHealth Hub is called Solution Match. It specifically focuses on:

Engaging healthcare providers, insurers, pharma and MedTech companies looking for a concrete ehealth solution and ready to implement it.

eHealth Hub helps them clarify their requirements, research the offering and connect with the most relevant SME solutions on the market. Accelerating commercialization by outsourcing for free the filtering for fit of relevant digital health solutions in a rapidly moving ecosystem.



eHealth Hub organized a Solution Match service for Ospedale Pediatrico Bambino Gesù to detect problems with shunts (treatment for patients with hydrocephalus) in paediatrics. They were looking for SME partners and solutions to reduce misdiagnosis of shunt malfunction (by decreasing time intervals from symptoms due to malfunction to hospital care) and to reduce inappropriate emergency access. We did a public call for applications and received 24 answers. The following report displays the results of that call for applications, presenting in a synthetic way all the companies that applied and their main features.

Who is that report for?



SME's looking at promoting one or more remote monitoring and symptom reporting solution(s)

Companies specifically interested in remote monitoring and symptom reporting solution(s)











aparito

http://www.aparito.com

FOUNDED	2014
COUNTRY	United Kingdon
CONTACT	Elin Haf Davies
CEO	

elin@aparito.com

VIDEO

Solution Description

Our patient generated data software platforms provides a patient/ parent facing app (available in iOS and Android) to support the communication of real-time symptoms (including text, photos and videos), patient reported outcomes, quality of life scores, medication adherence and health care utility. The platform allows patients to keep information re their conditions / medications on their phone app. The communication platform can also allow for personalised responses (e.g. a patient reporting one symptom can trigger a different set of follow up questions compared to other symptoms reported.

• The main area(s) of activities

- Paediatrics
- Rare diseases
- Gaucher diseases
- Duchenne Muscular Dystrophy
 Tay-Sachs
 - Tay-Sachs
- Juvenile Idiopathic Arthritis
- Niemann-Pick C
- Mucopolysaccharide
- Bowel/bladder dysfunction
- Insomnia
- Pompe
- Complex Epilepsy

The specialization(s)

- Neuro-metabolic disorders e.g. niemann-pick
- Gaucher disease
- Childhood epilepsy





www.AsthmaMD.org

FOUNDED	2013
COUNTRY	USA
CONTACT	Salim Madjd
CEO	
Salim@AsthmaMD.org	

Solution Description

We would leverage our expertise in building AsthmaMD to create an iOS mobile app, an Android based mobile app, connected to a secure cloud system with access to remote monitoring by caregivers.

• The main area(s) of activities

AsthmaMD is the number one asthma management solution in US. We focus on remote monitoring and self tracking and management of asthma and simplify caregiver process of remote monitoring of their asthma patients.

The specialization(s)

Combining great user experience with innovative approach with robust, secure and scalable technology.



Cardio Diagnostics 😵

www.cardiodiagnostics.net

FOUNDED 2011 COUNTRY USA

CONTACT Jouana El Khoury

Operations Manager

jouana.elkhoury@cardiodiagnostics.net

VIDEO

Solution Description

We would leverage our expertise in building AsthmaMD to create an iOS mobile app, an Android based mobile app, connected to a secure cloud system with access to remote monitoring by caregivers.

• The main area(s) of activities

Cardiology space Proper diagnosis of Arrhythmias Arrhythmia management

The specialization(s)

AI Cloud-based softwares Clinical ECG Expertise Remote Cardiac Monitoring Solutions



https://digitalmedlab.com

digital Med

Lab™

FOUNDED	2012
COUNTRY	Switzerland
CONTACT	Patricia Sigam
CEO	

ps@digitalmedlab.com

VIDEO

Solution Description

+SanteDesk is a digital health solution including a patient mobile app and a provider online dashboard. With +SanteDesk, the patients with chronic disease can monitor their conditions the most easiest way. The diary come in form of an easy-to-use and convenient questionnaire. Next to the diary the patient can collect information about: medication, medical condition, allergies, immunization. Next to this, the solution integrates a telemedicine module, used by the patient to send messages directly to selected providers and automatically share the data collected. To complete the solution, guidelines and care protocoles are also implemented in the +SanteDesk. +SanteDesk online dashboard displays graphic representations of the evolution of each patient for an easy review by the provider.

The main area(s) of activities

Digital Health

• The specialization(s)

Mobile Technology for Healthcare





http://www.doctivi.com

FOUNDED	2016
COUNTRY	Spain
CONTACT	Frederic Llordachs-Marques
Cofounder	

fllordachs@doctivi.com

Solution Description

Doctivi is providing a telemedicine solution deployed in 75 Barcelona schools connected to the pediatric hospital's ER during school hours, to give first aid evaluation and counseling to teachers, for the last two years. Just now we are launching a bookable telemedicine and telepsychology end to end multidevice solution for families in Barcelona area. We will have 1000 connected families before 2019. As videoconference and platform (with a basic EHR) are locally owned, cloud, RGPD compliant, we can adapt some specific solutions to have a real time monitoring and/or tracking of the patient.

Doctivi platform integrates online with clinical devices placed in patients' home to monitor temperature, blood presure, Oxigen blood levels, hart rate, peak flow, weight and other medical parameters. Data from the patient is presented to clinicians through Doctivi web-portal to allow monitoring remotely. Doctivi is working in protocols with Hospital de Nens de Barcelona for home care monitoring in children and in conversations with Hospital del Mar Barcelona for home care monitoring, and has an agreement with Palcare for home care monitoring in palliative care.

The main area(s) of activities

Telemedicine Telepsychology Digital Monitoring IOT Home Care Monitoring Wearable Tech

The specialization(s)

Pediatrics Psychology Cardiology Respiratory Medicine Home Care Palliative Care





www.ehealthline.com

FOUNDED	1999
COUNTRY	Ireland
CONTACT	Sorin Stircu
Regional Med	Tech Strategist
sorin.stircu@ehealthline.com	

Solution Description

Digital Connected[®] Health Platform provide an integrated ecosystem and mobile platform of technological applications, devices and digital innovation, enabling a new era of connected health where:

- 1. Individuals have easy access to their clinical information and are empowered to take control of their own health anytime, anywhere,
- 2. Individuals can easily interact with care providers and each interaction is part of a seamless continuum of care,
- 3. Care teams can collaborate with reference to their patients' specific conditions,
- 4. Care providers can be automatically alerted to abnormal results that may indicate action is required before their patients' conditions becomes severe,
- 5. Care providers have immediate access to patient information in real-time to support quick, and effective clinical decision making. Patient remote intervention and symptom management system promotes the delivery of evidence based self-care advice in a timely manner; and mediate the role of physician nurses to effectively provide real-time patient support.

Connected Health© and advanced Symptom Management System and Patient-Reported Outcomes, improves real-time patient support and communication with the health care team and are therefore a priority to improve the care of hydrocephalus. The system's knowledge base rules incorporate risk stratification and the need of shunt revisions; estimates the risk of malfunctions (head enlargement, neurological signs, etc.

The main area(s) of activities

Patient remote-monitoring Mobile platform Hospital and EHR systems with Artificial Intelligence and Deep Learning Life Sciences Healthcare Insurance

The specialization(s)

EHL platform cover multi-disciplinary specialty including patient-reported income and outcome measures



HealthCareCoCreation

FOUNDED	2015
COUNTRY	Germany
CONTACT	Frank Weber
Co-Creation Entrepreneur	

healthcarecocreation@gmx.de

Solution Description

Patient Safety Baseline Profile:

This module captures, determines and provides a baseline assessment of an individual's patient safety - risk profile at different stages in the patient journey before, upon admission and at discharge from an acute care setting.

Dynamic Patient Signs Monitoring:

This module captures and visualizes all signs of patient status, and their changes, depending on the care or home setting.

Patient Dynamic Risk Assessor:

It captures the data from the Dynamic Patient Signs Monitoring Module and runs them through risk algorithms, trend data, the patient safety-risk (PSR) baseline and other computations to calculate and update ongoing, patient safety and risk status scores. It then feeds these signals into a visual interface as well as the Patient Safety Notifications and Response Manager (the next module).

Patient Safety Notification and Response System:

This module communicates a status, and any change in patient safety status, to a defined group of actors, in order to suggest or invoke some form of action.

An action in our view is not necessarily an alarm. It may be an action to check a trend in a sign, review a particular sign, or simply ask how the patient is doing.

Adaptive Safety Control and Learning System:

Finally, the Adaptive Safety Control and Learning System supports a nurse team and/or setting "safety manager" to set-up, tailor, modify, monitor, manage and interrogate the LeapFrog patient safety solution.

• The main area(s) of activities

Consortium of the following SME's: Cognuse, Patientrack and Aparito.

These SME's have been working on a joint LeapFrog solution for "emergent patient state to be signaled and acted upon before it becomes serious. Profile, Monitor and adapt to emergent changes in patient safety and Risk.

The specialization(s)

Emergent patient state to be signaled and acted upon before it becomes serious. "Profile", "Monitor" and "Adapt to emergent changes in patient safety and risk"

DATARE

www.datareg.eu

FOUNDED	1999
COUNTRY	Italy
CONTACT	Marco Frontini
CEO	

marco@datareg.eu

Solution Description

Datareg is an Outcome Management Platform, with analytics capabilities with a specific engine module, called Datawise, and data warehouse functions with a specific module, named Datawide.

Being the final scope to enable VBHC (Value Based Healthcare) through RWE (Real World Evidence) data, our ecosystem is now concentrating the best effort into analyzing Outcomes collecting and normalizing data from all the possible sources, breaking all the Technologies barriers and creating new Skills for these new challenges.

It's been engineered adopting the most modern technologies, that will enable uncostly horizontal and vertical scalability, multidisciplinary and multicentric extension, with easy and protected real-time data access and analysis.

Our scientific approach is aiming to be the contact point of research and clinical activities.

Right now, data quality is not treated nor monitored scientifically, resulting in not valuable Outcomes for analytics, and cannot feed AI (ML, NLP) without compromising the outcome measuring. Therefore we started by measuring KPI's of the KPI's, since it's no secret that data in healthcare is not properly collected, yet. Kpi's is not the only way we do this, but also we have a set of real-time alarms and notifications to data managers to make them aware of data quality issues and take action as soon as possible.

Datareg can be fed by any data source, structured but also unstructured, as a proof of the top technologies involved.

• The main area(s) of activities

Healthcare

The specialization(s)

Clinical Intelligence Data Collection EHR



medopad

www.medopad.com

FOUNDED2011COUNTRYUnited KingdomCONTACTShahram NikbakhtianHead of AI & Machine Learning

sam.nikbakhtian@medopad.com

VIDEO

Solution Description

The Medopad platform comprises a patient-facing app (on iOS and Android) with a range of modules configurable for patient groups, and a clinician webportal to view patient data. The app integrates with wearable devices to capture 100+ data types such as heart rate and steps.

Current integrations include Withings' Blood Pressure device, and future include a ECG monitor and a urine analysis device. These devices allow biomarker and real-world data to be collected passively and integrated into our database. As Apple's Mobility Partner. Medopad follows Apple's design principles of:

simple, user-friendly interface

modular design (ideal in this case to cater for the complex nature of the healthcare industry)

Modules include: Medication Tracker, monitoring adherence to the patient's drug regimen and provides reminders

Symptom Log, allowing the patient to report clinician predetermined symptoms

Tailored Patient Reported Outcome Measures (PROMS) and Questionnaires

My Journal, a free text input capable of recording subjective patient-entered notes

Data from the patient app is presented to clinicians through a web-portal to inform actionable clinical insights and allow the prediction and monitoring of potential shunt malfunction remotely.

Through the utilisation of this new dataset, Medopad will develop a predictive analytics solution capable of flagging patients with potential shunt malfunctions as a second phase of this project.

• The main area(s) of activities

Medopad's solution is disease-agnostic, user-friendly, and easy to scale. It has been used to monitor patients remotely through collecting symptom, medication adherence, activity, and vital sign data, and Patient Reported Outcome Measures (PROMs). The platform is a CE-marked class-I Medical Device registered with the Medicines and Healthcare products Regulatory Agency (MHRA), has Information Governance level 2 and is GDPR-compliant. We have validated our 6- Minute Walk Test (GMWT) module in a cross-sectional study at the Department of Cardiology, University Medical Centre, Gottingen, Germany.

The specialization(s)

Exsiting Medopad projects have focused on rare diseases. Successful collection of data has enabled Medopad to be acknowledged as Standard of Care at the Royal Free, and for Diffuse Intrinsic Pontine Glioma (DIPG) patients at HCA's Harley Street Clinic.

Medopad was used to support children with a brain cancer DIPG receiving chemotherapy in 2017. DIPG is a primary, high grade tumour in children with 10% surviving > 2 years after diagnosis. Medopad was used to send videos of certain tasks to the clinician to monitor recovery, progression, and impact on QoL. This ongoing project and our experience in Rare Disease remote patient monitoring demonstrates that we are the ideal partner to develop a Hydrocephalus Shunt Failure prediction solution.

📤 medtep

www.medtep.com

FOUNDED	2011
COUNTRY	Spain
CONTACT	Jordi Cabot
Managing Dire	ctor

jordi.cabot@medtep.com

VIDEO

Solution Description

Medtep is cross-pathology care management platform that connects healthcare professionals and patients / caregivers through personalized care plans. We take validated follow-up protocols and convert them in care plans patients can understand and engage with. Through these plans we facilitate lasting behavioral changes and increase patient adherence to their follow-up process (medication, diet, activity, healthy vs. toxic habits, symptoms tracking, surveys, ...) while providing for patient monitoring that allows to identify patients at risk through notifications and alerts, and to easily track the personal health records on a population or individual basis.

After many years developing care plans we have developed a proprietary care plan markup language (CPML) that allows us to configure all the elements of a specific care plan (that is the digitization of the follow-up protocol) in a very agile way, which allows to quickly deploy the solution vs. other approachs that take long lead times and expensive development with high uncertainty.

• The main area(s) of activities

Health Technology Remote patient monitoring Patient adherence

The specialization(s)

Our care management platform enables healthcare providers to quickly digitize their follow-up protocols to improve patient adherence and facilitate patient monitoring

NEURALLYS

DISPOSITIFS MÉDICAUX AU SERVICE DE LA NEUROLOGIE ET DE LA NEUROCHIRURGIE

www.neurallys.com

FOUNDED	2016
COUNTRY	France
CONTACT	Philippe Auvray
CEO	

philippe.auvray@neurallys.com

VIDEO

Solution Description

Our current solution is composed of an implant measuring the intracranial pressure and other physiological parameters (the device is implanted during a shunt surgery or shunt revision surgery) and communicating to a smartphone (the patients or the parents are also invited to fill in a questionnaire on the App). The data are transmitted to the cloud to allow the medical team to receive warnings and data from the patients Smartphone, via a WEB based application. This will bring reactivity in term of shunt issue management and will provide an ICP data historic for more accurate patient follow-up and diagnosis.

The main area(s) of activities

Neurallys is a start-up working on innovative medical devices for neurology and neurosurgery. We are developing a medical device to monitor the intracranial pressure of shunted patients, in a fully ambulatory way.

The specialization(s)

Medical device development Electronics Microelectronics Software development AI





http://newborn.solutions

FOUNDED2015COUNTRYSpainCONTACTJavier JimenezCEO

javier.jimenez@newborn.solutions

VIDEO

Solution Description

Neosonics solution is a first-in-class medical device to non-invasively screen for infant meningitis to provide quick, easy and cost-effective detection of infant meningitis. The device is placed in the fontanel of the baby, the area of the head where the bones are not closed yet, and at the push of a button measures the white blood cell (WBC) count in the Cerebrospinal Fluid (CSF) right below. Because CSF WBC diagnostic levels are well defined for meningitis, therefore, only if CSF WBC is high will an LP be performed and treatment be administered. NBS has IP protection of the method to detect circulating cells in superficial body fluids. It has been protected by means of an international PCT application that already entered national phase and with number PCTEP2016072125.

Further IP protection is being considered. The device, based on high-resolution ultrasounds, consists of:

- A base and a probe with a replaceable tip (or consumable) that needs to be changed after use in each patient. This tip minimizes contamination risk between patients and needs replacement after each measurement on a patient.
- Proprietary algorithms that enable accurate measurement and that, in addition, can detect tips needing replacement and
 prevent a new measurement until a new tip is applied. Because it is non-invasive the device will also be used to monitor
 patient's treatment response by means of tracking CSF WBC evolution, which decays with a positive response.

• The main area(s) of activities

Non-invasive screening and monitoring of infections in superficial body fluids

The specialization(s)

R&D of first in class medical devices for solving clinical needs, having specialized in Pediatrics



www.nonnatech.com

FOUNDED	2014
COUNTRY	USA
CONTACT	Gary German
President & Co-Founder	
garvgerman@nonnatech.com	

VIDEO

Solution Description

Nonnatech's platform passively monitors a patient's activities of daily living, (e.g., eating and toileting), incontinence, gait, medication compliance, sleep patterns, weight, heart rate, and more. Nonnatech enables the detection of patient deterioration at the earliest stage by using machine learning (ML) and continually training our ML models to look for patterns predictive of a significant change in the patient's condition. This allows Nonnatech to become more accurate in its predictions, such as early detection of critical changes that indicate the onset of chronic conditions, identifying patients non-complaint with medications, cognitive decline, frailty, pressure ulcers, at risk for falls, developing an infection and eventually predict shunt malfunctions. Users can also specify when they would like to be specifically notified in addition to creating their own rules for risk stratification and need of any shunt revision. For example, if the patient's weight increases by more than X pounds within Y days, have not been consistent with taking their medications, are sleeping more/less, using the commode less frequently, and has become incontinent. Our models can adjust the threshold levels over time, enabling in even further accuracy. Nonnatech's solution is device agnostic, meaning any ready available Bluetooth, Z-wave, or Zigbee enabled device will work on our platform, in addition to unique sensors created by Nonnatech (bed, chair, toilet, floor and incontinence).

• The main area(s) of activities

Nonnatech's chief differentiators are its proprietary data sets, machine learning models, and ability to capture patient data passively. Other systems take a simplistic approach when monitoring a patient's health. Unlike these other platforms, Nonnatech considers the patient's gait, chronic conditions, medications, sleeping patterns, ADLs, changes in behaviors, patient demographics, and other factors that could indicate that a patient's health is deteriorating. We collect data passively, unlike competitive solutions who rely on self-reported data that many times is incorrect and incomplete. We also do not require patients to use wearable sensors and additional invasive methods to collect patient data

The specialization(s)

Without Nonnatech, care teams struggle to effectively monitor patients, resulting in the wasteful spending of valuable resources in trying to keep these populations living in their own environment longer and out of the hospital. Providers struggle to identify events or syndromes that progress slowly over time (e.g., cognitive decline, frailty) often have poor demarcation as to onset and transition to new states making the changeover to a new state difficult to recognize. Unlike current assessment practices, Nonnatech enables early detection of patient deterioration and critical changes that indicate the onset of chronic conditions, cognitive or functional decline preceding many important events or syndromes. Current methods make it difficult.



www.primum.es

FOUNDED	2015
COUNTRY	Spain
CONTACT	David de Mena
CEO	

dvdmena@primum.es

VIDEO

Solution Description

Primum Health offers a Homecare Telemonitoring System PHTMS for chronic patients that permits a better level of healthcare, a control of the patients anywhere and reduction of costs. Primum Health has a mobile telemedicine system for monitoring patients, for the elder and chronic patients, improving their quality of life and reducing the healthcare costs.

Vital data from wireless medical sensors are taken by a mobile device and sent with standards through a private mobile network to a secure cloud-based platform where doctors can set alerts, make diagnose and have access to the patient's medical record because all the data are in HL7 format. Patient medical records can be integrated with any EHR already installed.

The main area(s) of activities

mHealth

• The specialization(s)

Primum is an innovative company dedicated to provide mHealth solutions to the Health challenges of today and tomorrow. Empower the patient with a dedicate mHealth tablet, connected with medical devices and wearable, contain approved apps and connected with Public/Private Health System with standards like HL7, FIHR or DICOM.

Primum offers a Homecare System for chronic patients that permits a better level of healthcare, a control of the patients anywhere and reduction of costs.



PROMPTLY Health Analytics

www.promptlyhealth.com

FOUNDED	2017
COUNTRY	Portugal
CONTACT	Olivia Oliveira
Product Manag	aer

olivia.oliveira@promptlyhealth.com

VIDEO

Solution Description

Promptly is the perfect personalized solution for patients. Promptly supports patients to get healthier, by tracking and measuring health outcomes, and by helping patients to get over the most difficult paths of their diseases. We are building the largest community of patients, a space where each patient may share his fears, symptoms and clinical outcomes with doctors and their caregivers, and with other patients who are going through the same disease.

Promptly is an online platform to collect and analyse scientifically standardized data regarding healthcare outcomes reported by patients (Patient-Reported Outcomes), allowing them to know, keep track and compare their outcomes with the standard of care.

Patients use Promptly to truly cope with their diseases, to understand and anticipate how they will feel after each treatment, medication or surgery, and to be part of a community of patients that relate to their symptoms and share their fears, expectations and health outcomes.

Healthcare Providers may use Promptly to improve the care they deliver to patients, by following-up their outcomes after each treatment and tailoring clinical protocols to specific patients' needs

The main area(s) of activities

eHealth solutions and Data analytics

The specialization(s)

Promptly is an online platform to collect and analyse scientifically standardized data regarding healthcare outcomes reported by patients, allowing them to know, keep track and compare their outcomes with the standard of care. We are conceding a personalized outcomes management system, totally centered in patients, providing them the most relevant information: the health outcomes they may expect, reported by other patients who had the same diseases or symptoms.





RDS lab a DSRlab Group Company

www.rdslab.com

- FOUNDED 2009
- **COUNTRY** Italy

CONTACT Giulia Di Tomaso

Project Manager - Biomedical Engineer

giulia.ditomaso@rdslab.com

VIDEO

Solution Description

- A. Wearable system equipped with sensors for real time monitoring of: respiratory rate, blood pressure, body temperature, ECG, PPG (oxygen saturation in arterial blood), GSR (sweat). The wearable system will be composed of two units: 1 a thoracic unit, either a belt or a t-shirt (with Breathing rate, ECG, Body Temperature sensors), and 2 a wrist band (with PPG and GSR).
- B. A user interface (UI) available as a mobile app and a web app. For each patient the following information will be stored: unique ID of the Shunt Device, Picture of the Child, Morphometric Measures. Through the UI the patient care giver and the patient clinician can report clinical signs and symptoms and upload lab and imaging reports. From the UI the clinicians can also visualise the vital parameters coming from the wearable sensors The UI can also include programmable push notification and reminders to help the patient management.
- C. Data Base (DB) in Big Data logic, with advanced encryption methods, for the storage of both processed and raw data. The DB is highly performing both on real time and historical data queries. The high volume of data that can be stored in the DB allows to build a knowledge base for further studies such as risk stratification analysis and biomarkers characterization.
- D. An Artificial Intelligence and Alert System : through the analysis of acquired data and specific algorithms, predictive models and indices can be extrapolated to evaluate the patient's state of health.

• The main area(s) of activities

Information Technology

The specialization(s)

RDSLab S.r.l. offers its clients professional consultancy and services in various fields of information technology, with particular reference to:

- Architectures design
- Communication network development
- · Internet of Things communication protocols and network design and development
- Mobile App development;
- Network security;
- Data security and encryption;
- High Performance Software Development
- Data treatment and storage in compliance with local authorities standards for data protection.

The RDSLab S.r.l. eHealth division, as part of the HEREMOS technology offer also entails:

- Wearable sensors design and development
- Data analytics and Machine Learning
- Medical Software development and data management.

www.rmdy.health

FOUNDED	2000
COUNTRY	USA
CONTACT	Amir Kishon
CEO	

amir@rmdy.health

Solution Description

- A. RMDY SaaS platform enables healthcare stakeholders to quickly and easily create their own white-label collaborative digital therapeutics and patient engagement services.
- B. The RMDY platform supports the creation of patient engagement services for condition management, medication therapy, pre/post care, pharma beyond-the-pill, behavior health and wellness management.

• The main area(s) of activities

RMDY Health is a NYC based Digital Health company, offering SaaS platform that enables healthcare stakeholders to quickly and easily create their own white-label collaborative digital therapeutics and patient engagement services .

The RMDY platform supports the creation of patient engagement services for condition management, medication therapy, pre/post care, pharma beyond-the-pill, behavior health and wellness management.

The specialization(s)

The rapid development of complex Digital Therapeutics solutions for large healthcare stakeholders.



www.healthdata.ai

FOUNDED 2005

COUNTRY

CONTACT

Fabian Reinhard

Switzerland

Managing Partner

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VIDEO

Solution Description

- With over 1'000 users, 20'000 managed patient profiles 7 and active deployments the platform is battle proven. We Α. have shown that we are able to scale the platform and extend it to additional medical disciplines. В.
 - 1. Clinical Documentation: Electronic health record structured according to the SOAP documentation method
- C. 2. Data Collection: Secure platform for multi centric protocol based prospective cohort studies and disease registries
- 3. Medical Research: Real time access to anonymized real life data for guality management and medical research D.

The main area(s) of activities

Seantis is building data-driven web applications with an open-source toolset and an agile mindset for medical research, the aviation industry, and the public sector.

The specialization(s)

Big data Health data Deep learning Data driven web applications Data visualization Analytics Agile software development Mobile first DevOps Secure cloud infrastructure



STETH IO

http://www.stethio.com

FOUNDED 2013

COUNTRY USA

CONTACT Mahesh Mulumudi

President and CMO

mahesh@stethio.com

VIDEO

Solution Description

- A. Steth IO is a iOS based acoustic data collection system that works in conjunction with an app. It snaps on an iPhone to allow acoustic non invasive flow monitoring at home.
- B. Steth IO app can track an implanted device or a shunt to assess CSF flow characteristics through a shunt.
- C. Acoustic data about the CSF flow dynamics in conjunction with the symptom complex reported by the patient is automatically uploaded to a secure server for review. These acoustic and spectral data can be analyzed by our Machine Learning algorithms to map the flow characteristics of the CSF and determine early flow disturbance.
- D. The flow characteristics analyzed in conjunction with the symptom complex reported by the patient can help create predictive algorithms to identify early malfunction of a CSF shunt.

The main area(s) of activities

Cardiology Flow Dynamics Artificial Intelligence Medical Device Development

The specialization(s)

Interventional Cardiology





http://www.therapyaudit.com

FOUNDED	2011
COUNTRY	United Kingdom
CONTACT	Christopher Wright
CEO	

chris.wright@therapyaudit.com

VIDEO

Solution Description

We have a very robust mature monitoring platform used in 15 hospitals in the NHS and by some customers for 20 years. We would need to integrate with a device to automatically identify shunts, but our partner Anglia Ruskin University can help with that. Our fixed-rule algorithms provide alerts for values out-of-range, deteriorating trends, and when data is not received when expected. Our current developments are to make the system more proactive using more intelligent algorithms. We have a patient app enabling the reporting of Patient Reported Outcomes.

The main area(s) of activities

Electronic blood test monitoring using clinician configured fixed-rule reactive algorithms for people taking potentially toxic drugs. Developing the solution to provide proactive personalised AI-based algorithms.

• The specialization(s)

Remote monitoring Digital health Auto-immune disease Disease Modifying Anti-Rheumatic Drugs AI



SchoolScreener

livesite.schoolscreener.com

FOUNDED	2011
COUNTRY	United Kingdom
CONTACT	Michael Ter-Berg
CEO	

michael@thomsonscreening.com

VIDEO

Solution Description

Our software infrastructure is developed and proven at scale. Data is collected either without an internet connection or fully online (no clinical knowledge required - parents or carers can either manually input data or or we can adapt our product interface which does not require manual data input). Data on the children/parents from patient records etc can be uploaded centrally, thereby eliminating manual data input. From the software management perspective the information regarding shunt is data managed automatically through the software. Eventually, the solution would use artificial intelligence to analyze clinical symptoms and predict shunt malfunctions.

• The main area(s) of activities

Remote monitoring and symptom reporting form the automated 'back end' to our SchoolScreener product widely used in the English National Health Service (current applications are for child vision, hearing and BMI). We have developed the backend infrastucture to rapidly deliver solutions tailored according to any clinical condition and hospital/clinic requirements for remote data capture, automated data management, reporting and analysis in any language with the data feeding through to EPRs.

• The specialization(s)

Our company was a spin out from City, University of London. Our specializations are as per the answer to question 11 + our management team's expertise is developing and implementing clinical software products and solutions, managing the full development cycle (including outsourcing).



Veta Health

myvetahealth.com

FOUNDED	2016	
COUNTRY	USA	
CONTACT	Tanvi Abbhi	
CEO		
ckelly@myvetahealth.com		

VIDEO

Solution Description

Veta Health offers a platform for personalized, coordinated care. The flexible, customizable platform empowers patients to better self manage their health and provides care teams with the context to better manage their patient populations.

Over the long term, Veta Health enables patients, often the most overlooked members of their care teams, to take control of their health management by providing them with access to relevant content, guided care journeys, social resources, and community. It also serves clinicians who suffer from burn-out and lack of visibility into the longitudinal patient care journey by gathering clinically relevant information and translating it into actionable insights that positively impact the health of populations and enables greater health equity.

• The main area(s) of activities

Veta Health connects clinicians and patients outside the four walls of traditional care settings. Our clinically validated solution, offers a customizable, flexible front-end platform to accompany patients on their care journeys, in any context. Healthcare providers are tasked with treating patients holistically which necessitates following patients and patient populations beyond the scope of a doctor's appointment, procedure or hospitalization. This is designed to decrease the cost of care by reducing unnecessary utilization of high costs services such as an emergency room visit.

The specialization(s)

Pediatric & Adult chronic conditions with specialty in: Cardiology Neurology Pulmonology Urology General Wellness (children)





http://www.vidavo.eu

 FOUNDED
 2005

 COUNTRY
 Greece

 CONTACT
 Irene Patsioura

 Project Manager

networking@vidavo.eu

Solution Description

The solution proposed is based on the Vida24® system that is a modular mhealth suite, scientifically validated . Vida24® is an innovative patient telemonitoring service, which enables doctor-patient ubiquitous communication and collaboration, while the patient is at home or on the move. Vida24® adapts state-of-the-art technologies, like modular and responsive design and machine learning techniques for assessing health conditions, symptoms and signs and predictive differentials in health related data patterns. All the system runs on open-standards technology. The combination of vida24 and the solution proposed for shunt malfunctions, cover the need for the most accurate and professional IT hydrocephalus management. The solution uses main modules and functionalities of Vida24® platform and system but it will be specialized for hydrocephalus management (app and cloud). New algorithms will build which automatically identify patterns in the fused dataset, extract information and transform it into understandable structures to facilitate care knowledge. It will be a cloud computing based software application that aim at bringing evidence-Based management for hydrocephalus management, including shunt malfunctions assessment, remote patient monitoring and follow up, reporting and data analytics system. Via an interactive EHR and an app (and connected devices) the baby patient's carer uploads on the cloud platform, health and symptoms related data including vitals;

• The main area(s) of activities

VIDAVO operates in the field of ehealth / mhealth for fifteen years, linking citizens and healthcare providers over its intelligent monitoring and care management platform Vida24®.

Vida24® is a modular mhealth suite, trusted by thousands of users across Europe. It is the tool for healthcare providers to build their digital presence.

The system includes a bouquet of mobile health modules, ranging from chronic disease management, nutrition and activity online coaching, to doctor on demand, telepsychiatry, health assessment tools and more. The Vida24® customizable app synchs multi source data to the Vida24® cloud platform offering an end-to-end solution than can also bridge to any EMR system.

The specialization(s)

In short, VIDAVO offers:

- · Innovative solutions, addressing the individual needs of citizens and healthcare professionals
- Novel e/mhealth services
- Hand-held, carry-on, put-on attractive technology products, encouraging citizens to undertake an active role in monitoring their health and wellness status
- · A proven methodology to bridge the gap between research results and commercial exploitation

wexma

www.wexma.com

FOUNDED2011COUNTRYFinlandCONTACTPentti PaaluFounding partnerpentti.paalu@wexma.com

Solution Description

Patients self-report (using their own mobile phones with Wexma app) their pain and other symptoms. The reported symptoms and sensor information is transferred and real-time filtered to Wexma Analytics cloud. Our advanced analytics provides insight on unprocessed or post-processed data utilizing machine learning and reference patients' pain and other symptom data. Wexma's platform provides tools for clinical and pharmaceutical research utilizing Advanced Analytics, Machine Learning and Artificial Intelligence. MDs or other healthcare and rehab professionals utilize the alerts, reporting and prioritizing suggestions of the Wexma Analytics tool in an easily readable form.

Wexma Symptom Management solution is ready developed in co-operation with and trial tested in Helsinki University Hospital. As Wexma solution is very easy to use and ready tested it can be taken to trials use in a matter of weeks.

• The main area(s) of activities

Wexma provides services to hospitals with its Mobile Symptom Management Platform, which includes Artificial Intelligence and Machine Learning. Wexma's platform provides full spectrum of Analytics: Streaming, Predictive, Cognitive.

The specialization(s)

Wexma® Symptom Management Service using AI



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