BUSINESS
FINLAND

FUTURE HOSPITALS FROM FINLAND

SUSTAINABLE, DIGITAL AND INNOVATIVE SOLUTIONS

CONTENTS

WORLD IDEAS IN HEALTH

Finland is a small, approachable, highly innovative technology leader that solves problems in an agile way. World-class Finnish research, technology and invincible engineering skills enhance the quality of patient care.

FINNISH STRONGHOLDS

- Combined technologies and practices
- World-class architecture, strong engineering skills and expertise in digital infrastructure and connectivity
- Public-private collaboration to solve future challenges
- Tomorrow's innovations based on our world-class research and technology
- Many of the world's most innovative companies and ecosystems are located in Finland

#1

COUNTRY IN SUSTAINABLE DEVELOPMENT

UN SUSTAINABLE DEVELOPMENT REPORT 2021

IN AVAILABILITY OF SCIENTISTS AND ENGINEERS

WORLD ECONOMIC FORUM GLOBAL COMPETITIVENESSREPORT 2017–18

IN HIGHEST DIGITAL COMPETITIVENESS IN THE EU

DIGITAL ECONOMY AND SOCIETY INDEX 2019

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FINLAND BUILDS SUSTAINABLE FUTURE HOSPITALS

Hospitals are facing major investments in digitalization and the green transition, which the pandemic has accelerated. This has demonstrated that number of hospitals should be reconstructed and upgraded across Europe to offer more resilient and sustainable facilities for future healthcare needs. Finland offers sustainable, innovative and highly digital solutions for future hospitals.

THE CHALLENGES ARE

- How to bring care closer to patients at home?
- How to utilize data to provide efficient and effective care?
- How to provide the best possible care with fewer resources?
- How to make future healthcare socially, economically and environmentally sustainable?

SUSTAINABILITY

- New recycling concepts for hospitals
- Energy efficiency
- Building information management

DIGITAL SOLUTIONS

- Hospital-like care at home
- Optimizing use of hospital spaces
- Patient pathways

INNOVATIONS

- Based on world-class education system and research
- Triple helix (universities, industry, government) collaboration
- International collaboration and public private partnerships

BUSINESS FINLAND

FINNISH FUTURE HOSPITALS

ARCHITECTURE AND FACILITIES

New Children's Hospital

Digital treatment paths, modern operating rooms and real-time image transfer, space solutions, patient entertainment and modern communication devices.
Visit the hospital

Demanding specialist pediatric medical care
163 beds
Completed in 2018
EUR 184.5 million project

HUMAN CENTRIC

Lighthouse Hospital

Nature motives and materials to support healing. Focus on operational efficiency and proximity of all services needed, using shared staff and equipment in cross-disciplinary operating room spaces.
Read more

EUR 185 million project
180 beds
38 intensive care beds
16 operating rooms
10 000 surgical operations yearly
Completed in 2022
56,000 m^2

SUSTAINABLE

Laakso Joint Hospital

Energy recycling from waste heat and on-demand energy consumption, locally produced solar and geothermal power. Read more

65% carbon footprint reduction
922 beds
The first phase ready in 2026
EUR 838 million

DIGITAL

Oulu University Hospital

Use of AI, robotic surgery, digital imaging, telemedicine, smart buildings, information technology infrastructure and integrated EHR.
Read more

Specialized medical care in Northern Finland
856 beds
60 operating rooms
EUR 1.6 billion

VIRTUAL

Digital Health Village

A comprehensive eHealth service platform developed together with patients and healthcare professionals.
Read more

33 digital hubs offering public health services
Over 300 digital care pathways for patients with specific diagnoses
Digital coaching services for healthcare professionals
EUR 261 million freed healthcare capacity on the national level in Finland annually

FINNISH HOSPITAL TECHNOLOGY USED GLOBALLY

USA & **Aiforia:**
Transforming pathology practice with AI-based solution at Mayo Clinic

Norway & **Medanets**:
Increasing patient safety and saving time for patient care

Belgium & **Halton:**
Latest technologies for university hospital hybrid operation rooms

Sweden & **Lojer:**
Hospital and medical equipment at NKS, Nya Karolinska Solna

Ireland & **Optomed:**
Rapidly improving the speed and quality of retinal photography

Estonia & **International Hospital Design Alliance** (IHDA):
Design and renovation of Tartu University Hospital

Denmark & **Varjo:**
VR/AR technology assists in training of healthcare professionals globally

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RESEARCH AND COLLABORATION FOR WORLD-CLASS INNOVATIONS

ARCHITECTURE, CONSTRUCTION, FACILITIES AND SERVICES

INFECTION MANAGEMENT

CLINICAL RESEARCH AND CARE

Research institutions

Aalto University

- Healthcare Engineering, Management and Architecture (HEMA Institute)
- Health and Wellbeing Architecture (SOTERA)
- Research on Health and Wellbeing
- Measuring and Modeling for the Built Environment

VTT Technical Research Centre of Finland

- Air transmission of microbes
- Antimicrobial surfaces and decentralized diagnostics

Helsinki University Hospital

- Excellence in Pandemic Response and Enterprise Solutions E3

University Hospitals in Finland

- One-stop Digital Gateway to Finnish Biobanks and Biomedical Research (Fingenious ecosystem)

Collaboration projects and ecosystems

KEKO ecosystem develops a dynamic and efficient ecosystem around building data. Read more

KIRAHub promotes sustainable digitalization of the built environment. Read more

Green Building Council Finland provides know-how for sustainable development of the building and construction industry. Read more

E3 Excellence in Pandemic Response and Enterprise Solutions is a multi-disciplinary joint R&D project to maintain safe interaction. Read more

Indoor Air Quality ecosystem (IAQe) is a network of actors in the IAQ field developing and pioneering indoor air solutions. Read more

Future Clinical Trials project
Aims to accelerate and streamline clinical drug trials. Read more

Stroke-Data
Co-creates novel data-intensive innovations for stroke prevention and diagnostics.
Read more

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RESEARCH AND COLLABORATION FOR WORLD-CLASS INNOVATIONS

USE OF XR TECHNOLOGIES AND TRAINING

Research institutions

University of Tampere

Digital and Physical Immersion in Radiology and Surgery (DPI)

Aalto University

MASSE – Personalized Care With Mass-Production Efficiency

Collaboration projects and ecosystems

Photonics Finland
The single point of contact for photonics ecosystem in Finland.
Read more

Helsinki XR Center
An incubator for talent in the field of virtual and augmented reality (VR & AR) Read more

DIGITAL HEALTH SOLUTIONS

VTT Technical Research Centre of Finland

- Digital Health Solutions
- Robotics in health and wellbeing

Aalto University

- DiRVa – Building evidence of the value of digital healthcare solutions

CleverHealth Network
Ecosystem of digital health innovations.
Read more

FUDIS – the Future of Diagnostics
The network's expertise covers the entire chain from technology and material development to manufacturing methods and equipment development. Read more

ECOtronics consortium
Supports development of sustainable electronics and optics. Read more

ICT, CYBERSECURITY AND CONNECTIVITY

Jyväskylä University

- Cybersecurity testing facilities (JyvSecTec)

Oulu University

- 5G/6G testing laboratory facilities

FCAI Finnish Center for Artificial Intelligence
Community of experts solve real-life problems using both existing and novel AI. Read more

PRIVASA project is boosting data-driven research, development and innovation by making it easier to access and share health data without compromising individuals' privacy.
Read more.

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FIND NEW HEALTH SECTOR OPPORTUNITIES IN FINLAND

Our Invest in Finland services help international companies and investors to scout business opportunities in Finland and set up their businesses here. These services are confidential and complimentary and tailored to meet your precise needs. www.investinfinland.fi

OUR SERVICES INCLUDE:

Data collection and analysis
Opportunity analysis
Guidance on entry alternatives
Networking
Location management
Advice for setting up a business
Aftercare services

In Finland, many hospital districts, university hospitals, universities of applied sciences and cities offer excellent cooperation opportunities for developers of health and wellbeing products and services to test them in genuine environments.

Testbeds in Finland for health technology.

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SUSTAINABLE FUTURE WITH FINLAND

ON A NATIONAL LEVEL

- Finland aims to be carbon neutral by 2035
- Finland's EUR 2.1 billion recovery and resilience plan is strongly focused on the green transition
- The Europe Sustainable Development Report 2021 foresees Finland as the global pacemaker for sustainable development
- Finland is known for its social innovations, such as the maternity box, childcare nursing system and developing e-government services
- Finnish companies are at the forefront of censoring, indoor connectivity, artificial intelligence and 6G

IN HEALTHCARE

- The Finnish healthcare system's high quality is based on equal access and inclusiveness. The health and social services reform develops public healthcare and social welfare services compatible with future demands
- A high level of data registries and data pools supported with world-leading legislation enables research, innovations and development of future care solutions
- Finland has the ambition to be a model country for sustainable personalized healthcare
- National centers of excellence accelerate innovations: National Cancer Center FICAN, Drug Development Center, Neurocenter Finland and Genome Center

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TOWARDS SUSTAINABLE HEALTHCARE

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Figure credits: Leena Setälä 2021

SUSTAINABLE FINNISH HEALTHCARE

Finnish hospital districts are actively implementing measures for sustainability in their operations.

- Energy efficiency and sufficiency by using renewable energy sources, such as solar and geothermal power. Radiant heating and cooling panels
- Circular economy and material recycling at hospitals
- Sustainability criteria and goals for procurement being implemented
- The Hospital District of Helsinki and Uusimaa has launched a target of carbon neutrality by 2030
- Sustainable building targets for new hospital buildings
- Sustainable logistics projects being implemented

In the operating rooms of Terveystalo, a leading private healthcare provider in Finland, there comes more than 15,000 bags of plastic waste a year. Lassila & Tikanoja's experts help Terveystalo to develop plastic recycling and reduce the amount of mixed waste for example by analyzing different plastic types. Currently, plastic is already being collected separately in several Terveystalo's clinics and hospitals. In total, L&T is responsible for the waste management in more than 200 Terveystalo clinics.

Read more

BUSINESS FINLAND

FINNISH SOLUTIONS FOR FUTURE HOSPITALS

FROM HOSPITAL DESIGN, TO RUNNING HOSPITALS AND PROVIDING CARE AT HOME

1. HOSPITAL DESIGN, PLANNING AND CONSTRUCTION

Hospital Design Alliance, AINS Group, AW2 Architects, Granlund,, Integrated Healthcare Design, Nordic Healthcare Group, Gravicon, JKMM Architects, SRV, Strandmed, UKI Arkkitehdit

2. HOSPITAL INSTALLATIONS AND TECHNIQUES

9Solutions, Haltian, Hitachi, iLOQ, Itula, Oilon, PPO-Elektroniikka, Roxia, Smartvatten

3. HOSPITAL INTERIORS

Finndent, GoSleep, Hublet, Isku Interior, Korpinen, Light Cognitive, Lojer, Medirit, Monidor, Neurosonic Finland, Oras, Yetitablet/Kuori

4. HOSPITAL LOGISTICS AND HOSPITAL OPERATIONS

Axel Health, Citynomadi, EagleData, Ecosir Group, Goodmill, Hygga, Idesco, Mediclaudo, NewIcon, Touchpoint, CareCare, Unitary Healthcare, Verso

5. INFECTION PREVENTION AND CONTROL

Air0, Genano, Halton, Inspector Sec, SmartWatcher, TKR-Marketing, KiiltoClean, Nanoksi Finland, SKC Desi, Spectral Blue

6. LABORATORY, IMAGING AND DIAGNOSTICS

Aiforia, Cerenion, Finbiosoft, Grundium, NE Device SW, Optomed, Planmeca, Planmed, Resistomap, Vaisala

7. SECURE DATA AND ANALYTICS

Abomics, Adusso, BCB Medical, ESIOR, Euformatics, Lääketietokeskus, Medanets, Medbase, Secapp, Raisoft, TietoEvry, Veil.ai

8. SAFE SURGERY PLANNING AND OPERATING ROOMS

Adesante, Bonalive, Buddy Healthcare, Disior, Injeq, Merivaara, Modulight, Nexstim, Osgenic, Serres, UPM Biomedicals, Varjo

9. HOSPITAL AT HOME – DIGITALLY ENABLED CARE

Bittium, BeeHealthy, BrainCare, Cardiolyse, DBC Global, Fibion, HealthFox, LivingSkills, Medeka, Medixine, Ninchat, Popit, VideoVisit, VitalSignum, Adamant Health, PulseOn

1. HOSPITAL DESIGN, PLANNING AND CONSTRUCTION

Optimizing project results and maximizing efficiency through all phases of design and construction. Combining Nordic visuality with functionality. Using the latest virtual planning and modeling tools. Creating energy efficiency with recycling and renewable sources and modular and user-centered design.

Integrated Hospital Design Alliance
- AINS Group
- AW2 Architects
- Granlund
- Integrated Healthcare Design
- Nordic Healthcare Group

Gravicon
JKMM Architects
SRV
Strandmed
UKI Arkkitehdit

BUSINESS
FINLAND

IHDA ALLIANCE COVERS ALL ASPECTS OF HOSPITAL DESIGN

OUR SOLUTION

Integrated Hospital Design Alliance combines top Nordic expertise in hospital design from healthcare analysts and hospital architects to HVAC design and construction management specialists.

Integrated Hospital Design Alliance provides health care sector services from the first steps of a hospital project onto property maintenance.

UNIQUENESS AND IMPACT

One of the core features in Nordic hospital design is the strong focus on functionality. During the design process, spaces are carefully dimensioned together with users and tested through simulation. By designing optimal spaces, it is possible to provide high quality care while using resources efficiently.

Smarter spaces also mean fewer but better square metres and less energy consumption on heating and electricity which translates to lower operational costs and reduced CO_2 emissions. Possibly the most important health security concern is the hospital's ventilation. Well-designed and fitted ventilation helps prevent the spreading of microbes. To reduce the energy usage, the alliance has developed innovative solutions for hospitals. Energy efficiency and sustainability are improved by recycling the energy streams within the hospital and by using solar power, geothermal energy, and other renewable energy resources.

COMPANY

Integrated Hospital Design Alliance companies are Granlund Group, AW2 Architects, Integrated Healthcare Design, Nordic Healthcare Group and AINS Group.

REFERENCES

Oulu University Hospital Buildings A , B and F, HUS Trauma and Cancer – the Bridge Hospital, Laakso Joint Hospital, the renovation of Tartu University Central Hospital and Healthcare Center in Viljandi.
https://ihda.fi/references/

Granlund

Nordic Healthcare Group

AW2 ARCHITECTS

INTEGRATED HEALTHCARE DESIGN

AINS GROUP

BUSINESS FINLAND

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Integrated Hospital Design Alliance

DESIGN FOR THE USERS

OUR SOLUTION

The AINS Group brings high-level expertise in project management and structural and geotechnical design to meet the up-to-date requirements and future challenges of specialized medical care.

When your goal is a high-functioning and patient-centered hospital, we are your trusted partner – from the very beginning and throughout all stages of the project.

The AINS Group's team of construction management consultants, engineers and specialists are experienced in safe, user-oriented and sustainable hospital design and the integrated project delivery (IPD) model.

UNIQUENESS AND IMPACT

We use IPD to achieve ambitious goals in complex projects. IPD is based on the collaboration and integration of people, businesses, systems and practices. It harnesses the talents and insights of all participants to optimize project results and maximize efficiency through all phases of design and construction.

COMPANY

The AINS Group is a company of 1,000 Finnish experts in the construction and property industry and paves the way in construction engineering and consulting. For us, it's not just the result that matters but also how we get there.

REFERENCES

Future Hospital 2030 Oulu University Hospital Buildings A, B and F, HUS Trauma and Cancer Hospital – the Bridge Hospital, Tampere University Hospital, KYS New Heart, Turku University Hospital and Laakso Joint Hospital, Finland.

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BUSINESS FINLAND

Integrated Hospital Design Alliance

AINS GROUP

TOGETHER TOWARD A BETTER ENVIRONMENT

OUR SOLUTION

AW2 Architects offers a sustainable, user- and patient-friendly approach in hospital design to ensure a better healing environment. Our experience from previous hospital projects, especially in the Nordic and Baltic countries, gives us in-depth knowledge of the current trends in hospital design and the ability to create ideas for new, innovative design solutions. Our goal is to create an inspiring and functional environment to support both patient and staff wellbeing. We believe that pleasant spaces and easy-to-grasp functionalities are all elements of vital importance for the patients' healing and recovery.

UNIQUENESS AND IMPACT

An innovative Nordic and Baltic view of hospital architecture gives our work its unique way of seeking the best optimization both visually and functionally. It also gives us the ability to understand all the technical requirements needed to design a well-functioning hospital. Our Nordic heritage enables us to focus on minimizing the environmental and life-cycle costs of design work together with the technical designers. With this, we ensure meeting the ecological demands placed on today's hospital buildings.

Good hospital architecture is created together in an atmosphere of optimism and faith in the future.

COMPANY

AW2 Architects is an architecture firm based in Finland and Estonia. Our architects have global experience in architectural and interior design in complex special structures for healthcare provision.

REFERENCES

HUS Trauma and Cancer Hospital – the Bridge Hospital, Ahvenisto "Assi" Hospital, Laakso Joint Hospital and Ratamo Center, Finland. The renovation of Tartu University Central Hospital, Estonia. Franco-Vietnamese Hospital, Vietnam.

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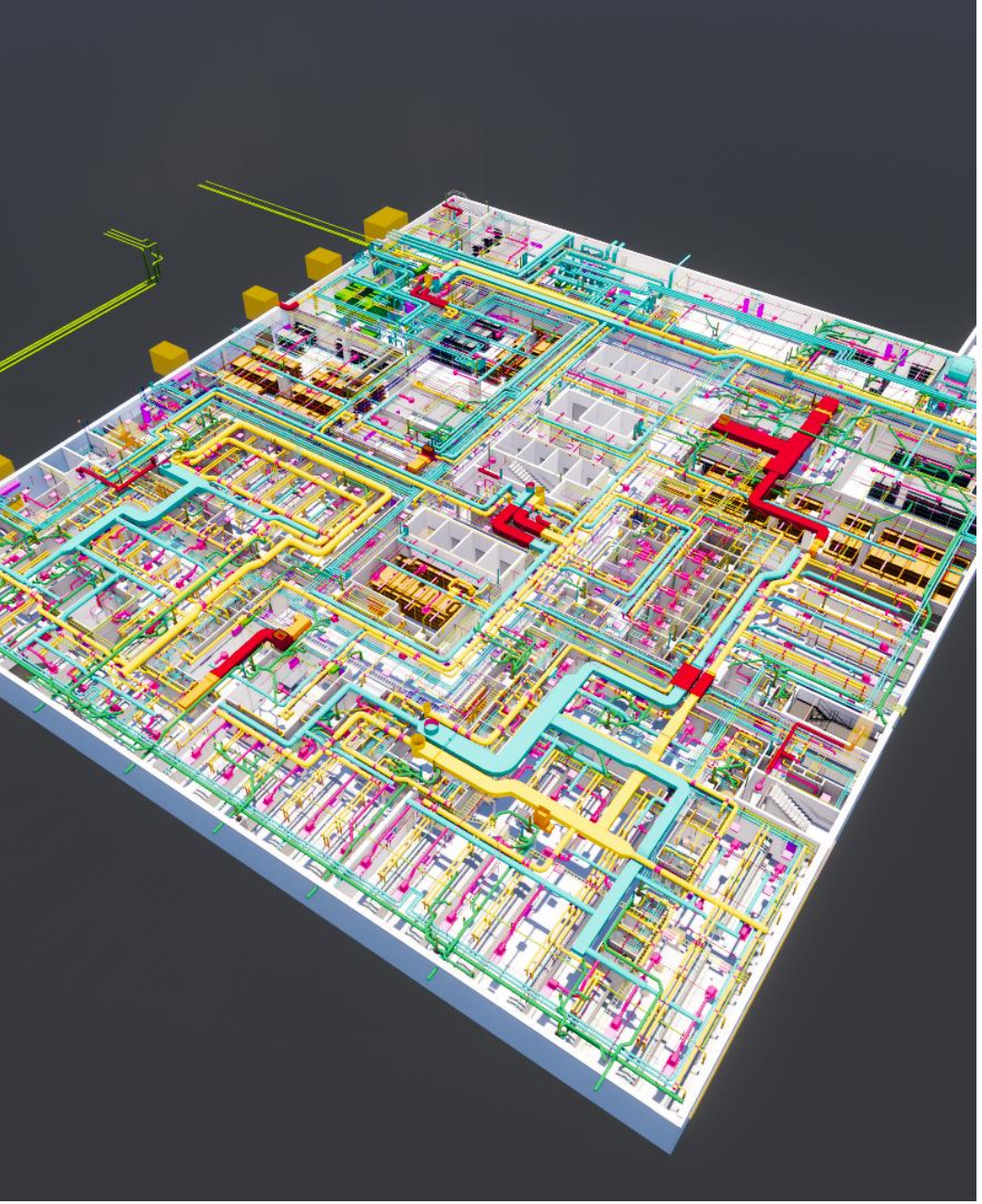
BUSINESS FINLAND

Integrated Hospital Design Alliance

AW2 ARCHITECTS



SMART HOSPITAL DESIGN AND CONSULTING

OUR SOLUTION

Granlund's hospital design is our biggest business sector. We use digitalization, the latest technologies and innovation to support both the design and commissioning of the hospital and the maintenance of the property.

Our hospital design covers all the technical building services, including all areas of special expertise:

- Mechanical, electrical and plumbing (MEP) design
- Heating, ventilation and air conditioning (HVAC) design
- Electrical design
- Building automation design
- Medical equipment design
- Energy consulting
- Cleanroom design
- Cost control and calculation
- Audiovisual and presentation technology design
- Carbon neutrality consulting

The Granlund Manager, our computerized maintenance system (CMMS), is also extensively used by our customers in the healthcare sector.

UNIQUENESS AND IMPACT

To reduce energy usage, the Granlund Group has developed innovative solutions for hospitals. With smart design and continuous energy management, a hospital can significantly cut its energy consumption. A hospital is a highly energy-intensive ecosystem. Heating, cooling, medical devices, ventilation and digital data flow all need power to operate.

Energy efficiency and sustainability are improved by recycling the energy streams within the hospital and by using solar power, geothermal energy and other renewable energy resources. Our smart, modular, scalable healthcare concept is one of our latest modern design trends. Granlund is also involved in a European working group that standardizes ventilation in hospitals, which allows us to take future requirements into account in our designs.

COMPANY

Established in 1960 in Helsinki, Finland, Granlund is a group of companies operating in the real estate and construction sector. Outside Finland and the Nordic countries, Granlund has offices in Asia, the Middle East, the Baltics and the United Kingdom, among other locations. We employ over 1,150 experts.

REFERENCES

Oulu University Hospital Buildings A, B and F, HUS Trauma and Cancer Hospital – the Bridge Hospital, HUS Children's Hospital, Laakso Joint Hospital, Hospital Nova, KYS New Heart and Turku University Hospital – T3 project, Finland.

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BUSINESS FINLAND

Integrated Hospital Design Alliance

Granlund

BETTER DESIGN, BETTER HEALTHCARE

OUR SOLUTION

INTEGRATED Healthcare Design understands that the diversification and rise of new industries involved in the design of new healthcare facilities lead to more complicated design processes. These fragmented design processes, where different fields collaborate often too late in the process, lead to unpredictable life-cycle costs and missed opportunities for innovation.

To address these challenges, INTEGRATED brings together all the relevant actors and facilitates collaboration throughout the process with an integrated approach. A multidisciplinary integrated design process enables more accurate cost planning and lower life-cycle costs. Overall, it makes way for innovation and results in better designed buildings.

UNIQUENESS AND IMPACT

INTEGRATED Healthcare Design provides a platform in the form of a consortium for companies to collaborate and design together patient-friendly, ecological and cost-effective healthcare facilities. We believe that design teams should work together from day one of a project to facilitate multidisciplinary research and development, set clear responsibility areas as well as prevent error estimates, lost information and expensive design solutions. At INTEGRATED, we believe that better design leads to better healthcare.

COMPANY

INTEGRATED Healthcare Design Ltd is a multidisciplinary healthcare design company founded in 2010. It is a consortium of experts operating in the field of hospital design and management.

REFERENCES

HUS Trauma and Cancer Hospital – the Bridge Hospital, Ahvenisto "Assi" Hospital and Ratamo Center, Finland. Tartu University Hospital Extension, Tallinn Hospital and Viljandi Hospital, Estonia.

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BUSINESS FINLAND

Integrated Hospital Design Alliance

INTEGRATED HEALTHCARE DESIGN

IMPROVE QUALITY AND EFFICIENCY IN HOSPITALS

OUR SOLUTION

NHG has the capability to support hospital projects in all phases, from planning and design to commissioning and continuous development.

We help our customers define the needs and the hospital's role in the service network by utilizing our understanding of service system requirements and analytical capabilities.

This provides a basis for the hospital's conceptual and functional planning, space requirements definition and design of service, care and logistics processes – together with patients and personnel.

To ensure that the hospital meets its functionality and efficiency targets, we can simulate all the processes of the hospital to identify bottlenecks and improve plans before large investments are made and actual construction work begins.

UNIQUENESS AND IMPACT

Utilizing proven consulting methodologies, a service design approach and analytical tools, we work together with hospital management, personnel and patients to ensure that the healthcare facilities enable high-quality care, support efficient operations and are patient centric.

COMPANY

NHG is the leading social and healthcare advisory and solutions company in the Nordics. We have over 200 professionals with in-depth industry expertise working with our clients to solve their most complex challenges and develop world-class facilities for patients and personnel.

REFERENCES

More than 30 hospitals: HUS Trauma and Cancer Hospital – the Bridge Hospital, Ahvenisto "Assi" Hospital, HUS New Children's Hospital, Laakso Joint Hospital, HUS Eye Hospital and Jorvi Hospital, Finland. Viljandi Hospital, Estonia.

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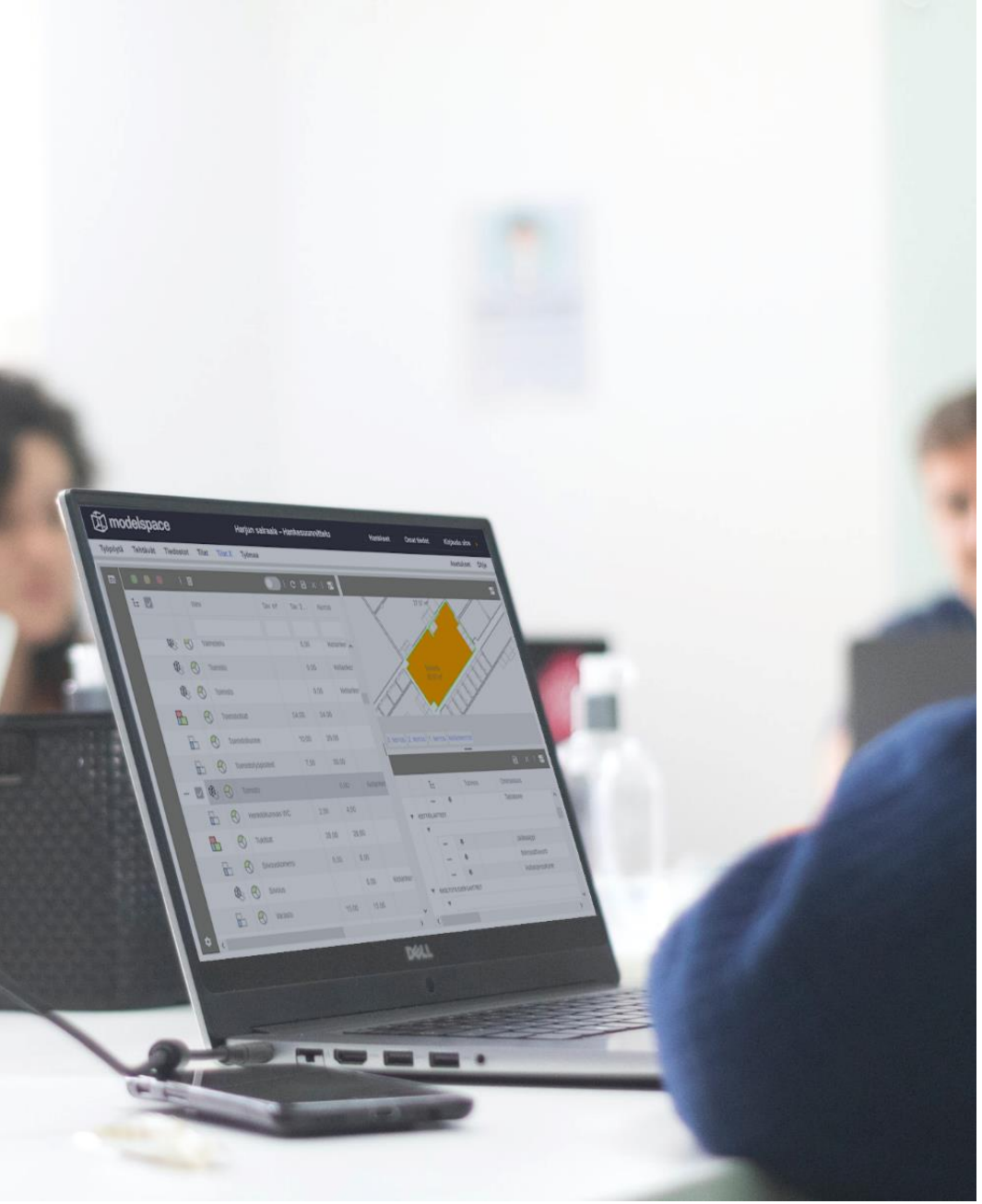
BUSINESS FINLAND

Integrated Hospital Design Alliance

Nordic Healthcare Group



MODELSPACE SOFTWARE AND BIM SERVICES

OUR SOLUTION

Gravicon's Modelspace is a cloud-based software solution designed to improve information management and communication workflow in complex construction projects. Modelspace Rooms is a module for information management. It helps construction professionals establish user-centric spaces and improve the communication workflow in complex projects. The solution targets space-related data, such as room requirements.

The use of Modelspace offers the opportunity for organizations to move toward digitalizing processes to ensure the success of their projects. The essential information on the Modelspace platform is transparent, easily modifiable and accessible to all stakeholders in real time.

UNIQUENESS AND IMPACT

Space is the most important part in a building. The biggest investment error is a room that does not match its purpose. Modelspace is the best tool for transparent collaborative design. With it, you can manage the room data and share information. It is 250% faster than the tools you are currently using. It opens building plans in just 4 clicks.

Modelspace enables you to make a functional and user-centered building. The more complex your project is, the more you need Modelspace.

COMPANY

Gravicon offers software solutions and BIM services for the construction industry. The company has 5 offices in Finland, a staff of 30+ and thousands of active Modelspace users monthly. We have been delivering Modelspace projects since 2010.

REFERENCES

In Finland only, we have tens of hospital and clinic projects. We have carried out projects at all five university hospitals in Finland.

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BUSINESS FINLAND

gravicon

HOSPITAL NOVA, CENTRAL FINLAND

OUR SOLUTION

JKMM Architects designed Hospital Nova in Central Finland to reorganize and reprogram all functions into 4 main parts – a hot hospital, an outpatient hospital, wards and support functions. We developed a new concept for the hot hospital, so all hot functions are arranged to optimize critical patient pathways, flows and logistics.

What is new is how architecture organizes a hospital. Four parts are grouped together around a central public arcade, reminiscent of shopping centers and airports. We introduced a knowledge center concept, including back-of-house space where professionals can work and interact. The logistics system has been designed to maximize efficiency, saving 10% in annual operational costs. A comprehensive "patient first" approach was developed and integrated into a nature-inspired patient experience.

UNIQUENESS AND IMPACT

What is unique about Hospital Nova is that, in terms of both functional concept and building type, it has been designed entirely from first principles. As the first new-build general hospital to open in Finland since the 1970s, Hospital Nova balances the clinical requirements of an innovative next-generation hospital with an intuitive design sensibility inspired by surrounding Finnish nature.

COMPANY

JKMM Architects is an integrated design practice of architecture, interiors, furniture, graphic design and art. Based in Helsinki, JKMM is creating the next generation of modern Finnish design.

REFERENCES

Hospital Nova, Central Finland.

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BUSINESS FINLAND

JK MM

CONSTRUCTING HEALTHCARE AND HOSPITALS

OUR SOLUTION

SRV has gained years of experience and expertise from challenging projects related to hospital and healthcare construction. As one of Finland's largest constructors of hospital projects, SRV can work with its clients to transform even the most complex wishes and designs into feasible plans.

SRV's strengths include its top-class expertise in building services engineering and hospital technology implementation. We have many successful examples of projects where we are building or have built a better tomorrow for Finnish medical care.

UNIQUENESS AND IMPACT

Large, demanding projects call for open and seamless cooperation. SRV and its customers are always driving toward the same goal with strong team spirit. Our objective is a new lifecycle-wise reality, where solutions related to construction ensure wellbeing, financial value and benefits for users, residents and the environment – for years and generations to come. Our genuine cooperation and enthusiasm for our work come across in every encounter. Sustainability is reflected in all our activities.

COMPANY

SRV is a developer and innovator in the construction industry. Our objective is a new lifecycle-wise reality. SRV was established in 1987 and is listed on the Helsinki Stock Exchange.

REFERENCES

Bridge Hospital, Helsinki, 2022; Hospital Nova, Jyväskylä, 2020; Tampere University Hospital front yard, 2019; and The New Children's Hospital, Helsinki, 2018, Finland, Laakso Joint Hospital.

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BUSINESS FINLAND

SRV

EXPERTS IN HOSPITAL PLANNING

OUR SOLUTION

Strand Med provides customized turnkey solutions in hospital planning, service design and process management. Together with our network of industry partners, architects, structural engineers and system providers, we deliver services mainly to surgical hospitals, both in-patient and day surgery. We offer assistance from the early phase of hospital feasibility analysis to functional design, including patient flow optimization. Our experts can also aid in managing treatment costs in hospitals, especially in surgical processes. Cost management begins with the proper design of the service offering. Is your hospital providing a selection of services that make economic sense?

UNIQUENESS AND IMPACT

In today's world, healthcare services also need to be organized in a sustainable way. Hospitals of the past have been far from optimized in their use of resources, both material and personnel. Waste production has also often been at an intolerable level. Sustainability begins with the design of premises as well as processes. The next steps include analyses and the fine-tuning of patient flow, personnel use, materials flow and procurement. Through proper analysis of these areas, even existing hospitals can improve their efficiency and sustainability.

COMPANY

We are a project organization. Our full-time staff provides project management and administration. For every project, we gather a team of experts from our network of clinicians and other specialists.

REFERENCES

Hospital NEO and Pohjola Hospital, Finland. Regina Maria Hospital, Romania. Bahrain Olympic Committee, Bahrain.

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BUSINESS FINLAND

STRAND MED

VALO™ - BETTER DESIGN SOLUTIONS

OUR SOLUTION

VALO ™, developed by UKI Arkkitehdit Oy, is a design method that aims to find the best design solutions together with the customer with modern presentation technology. VALO ™ has been developed in Oulu. During 2021, the method and related processes have been further developed and technical equipment modernized to better serve customers. The updated VALO ™ 2.0 is more versatile and agile than the previous version.

UNIQUENESS AND IMPACT

An essential part of VALO ™ is to walk with end users in a virtual space that corresponds to the current design situation and evaluate the spaces while walking. You can take part in a walking tour in Cave, for example, where the space is shown in stereo and 1: 1 size, but at the same time the space can be viewed remotely with different devices. The goal is to seamlessly integrate the customer's virtual world experience into the architectural design process. VALO ™ also includes a systematic method for collecting feedback. The use of VALO ™ to support architectural design brings added value not only to design professionals, but also to experts in their field and to the end users of the premises. The method adapts to many needs and is suitable for many industries - new large construction projects and large numbers of users, but also for change and consideration of small spaces.

COMPANY

UKI Arkkitehdit Oy is an Oulu-based architectural firm founded in 1958 with offices in Oulu, Jyväskylä and Helsinki.

REFERENCES

Laakso Joint Hospital
HUS Eye Hospital
Oulu University Hospital Buildings A, B and F
Tampere University Hospital.

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BUSINESS FINLAND

UKI ARKKITEHDIT

2. HOSPITAL INSTALLATIONS AND TECHNIQUES

Adding a feeling of security with personal safety solutions. Real-time locating systems, facility utilization and occupancy data. Real-time monitoring of energy and power distribution, electric problem detection and advanced digital access control. Environmentally friendly heating and cooling solutions to reduce carbon emissions. Solutions to minimize residual pharmaceuticals in wastewater and optimize water consumption.

9Solutions
Haltian
Hitachi
iLOQ
Itula
Oilon
PPO-Elektroniikka
Roxia
Smartvatten

BUSINESS
FINLAND

HOSPITAL SAFETY AND COMMUNICATION SYSTEM

OUR SOLUTION

The 9Solutions hospital solution is a safety and communication system developed for the staff and patients in health center and hospital environments. The system is based on accurate and continuous indoor location, delivering help quickly and keeping the staff automatically informed about events and tasks. The 9Solutions real-time location hospital system provides nurse call, personal safety, access control, device location as well as many other efficiency- and safety-enhancing features in a single system.

UNIQUENESS AND IMPACT

The real-time location system enables workflow optimization and efficient resource use, and most of all, brings help quickly when needed. The mobile solutions free up time for patient care by enabling efficient communication and information sharing. Alarms containing accurate information increase safety and help reduce overlapping work. Asset tracking optimizes the use of resources and saves care professionals' time searching for equipment. The 9Solutions system is easy and quick to install and effortless to maintain.

COMPANY

9Solutions was founded in 2009 and has an annual revenue of about EUR 8 million. We have over 50 employees in Finland and Sweden. Our vision is for care professionals to have more time for people.

REFERENCES

Helsinki, Oulu and Kuopio University Hospitals, Nova Hospital of Central Finland Healthcare District, Lappi Central Hospital and several smaller projects, Finland.

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BUSINESS FINLAND

9Solutions
Helping to care

EMPATHIC BUILDING FOR SMART HOSPITALS

OUR SOLUTION

Haltian Empathic Building - smart hospital aims to reduce all large and small tasks that take focus away from the patient. It enables clinical personnel to concentrate on patient care. With Haltian Empathic - smart hospital, it is possible to know where medical devices, staff and patients are at all times using state of the art real time location services. You cab check if a task has been completed and when it was done. Also, with data such as utilization and occupancy, it is possible to assist in predicting future trends and support decision-making based on facts. This smart hospital solution can be used to streamline operations regarding patient flow, equipment and facility management.

UNIQUENESS AND IMPACT

Our agnostic solution integrates to whatever other solutions you use. It can be implemented at high speed and offers immediate value. The solution increases satisfaction for all users of the hospital, such as employees, patients and other stakeholders.

COMPANY

Haltian is a global IoT solution provider and product development company from Finland. Haltian IoT solutions include the Empathic Building digital twin solution and Thingsee IoT device solution.

REFERENCES

NHS, Milton Keynes, UK
Helse Stavanger HF, Norway
Aspen clinics, AbuDhabi

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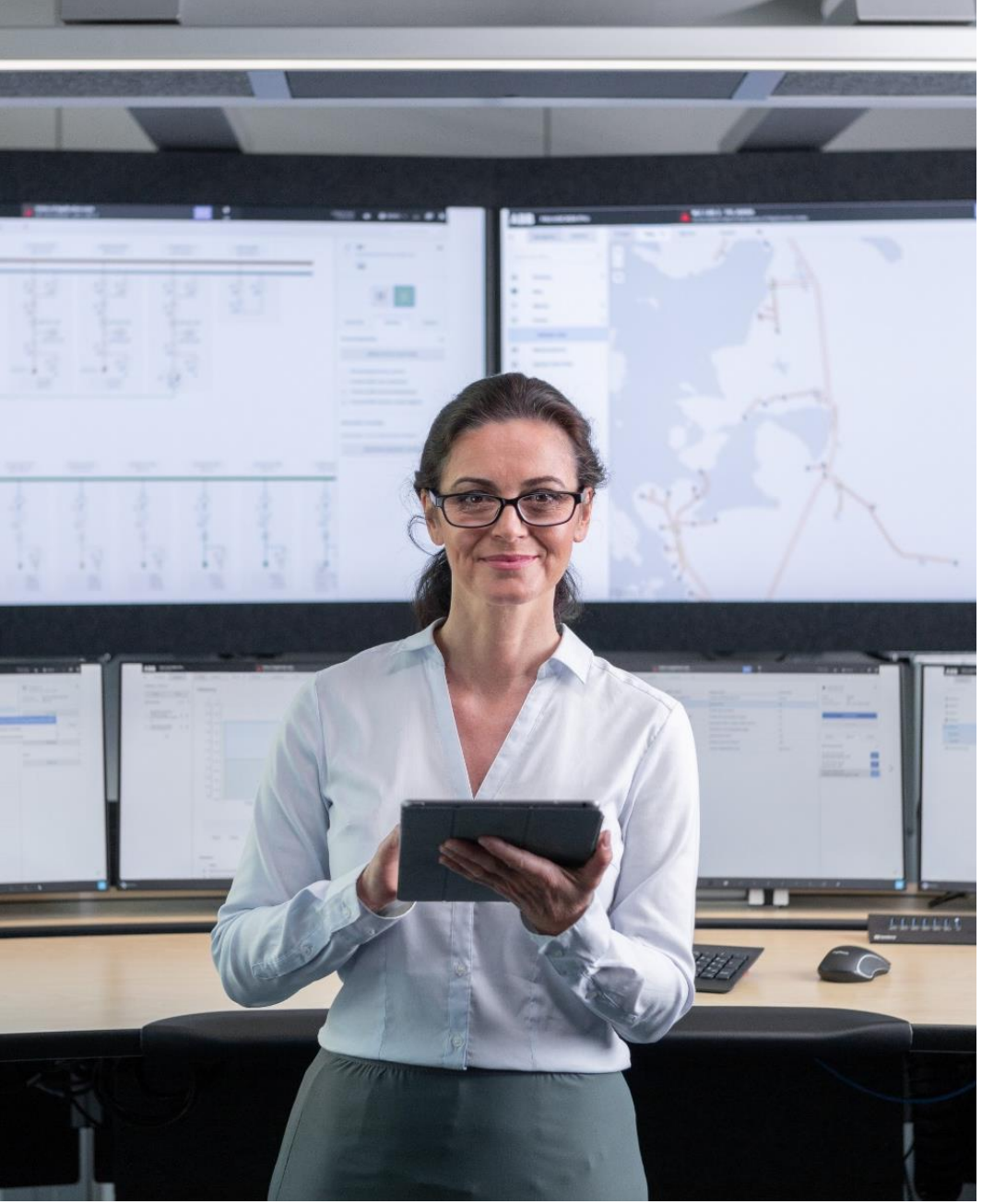
https://haltian.com/solutions/empathic-building-for-smart-hospital/

BUSINESS FINLAND

Haltian



SMART POWER AUTOMATION SYSTEM

OUR SOLUTION

Hitachi Energy technology manages the power distribution network for reliable power and efficient energy management, which are critical to the functioning of complex hospital activities. A steady supply of electricity is crucial to run operating theaters, intensive care units and emergency rooms, where life-saving equipment is deployed with exacting precision. Hitachi Energy delivers a MicroSCADA X control and monitoring system, which enables real-time monitoring and control. It includes energy metering and reporting capability.

UNIQUENESS AND IMPACT

The system streamlines electrical operations and trims operating costs while facilitating quality healthcare for patients. Advanced communication technology enables connection to the low-voltage network. MicroSCADA provides a more complete view of the power distribution network to ensure reliable power supply and provide high standards of care to patients.

COMPANY

At Hitachi Energy, we are advancing the world's energy systems to be more sustainable, flexible and secure.

REFERENCES

Hospital Nova, Finland, read more.

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BUSINESS FINLAND

HITACHI

DIGITAL LOCKS IN SAN JUAN DE DIOS HOSPITAL

OUR SOLUTION

iLOQ S5 enables device-to-device communication. In the past, access was granted through a master key available to many people. There was also no way to track who had entered and exited the premises.

The San Juan de Dios hospital installed an iLOQ S5 Online RFID/PIN Door Reader system on the door to the pharmacy. The door reader is connected to a door module and features a keypad and NFC/BLE reader. Access is only granted to authorized personnel through their personal digital key, which they hold up to the reader.

UNIQUENESS AND IMPACT

The advanced iLOQ S5 features allow vast amounts of data to be remotely updated and then shared between NFC/BLE readers, keys and locks in a building. Data, such as access rights, time limitations, a list of blocked keys and audit trails, is quickly shared between the devices before the door is unlocked. With all devices connected and communicating with each other, iLOQ S5 keeps information about access rights continually up to date. The number of people with access to the facility is reduced.

COMPANY

iLOQ transforms mechanical locks into digital locking and mobile access management. Battery- and cable-free solutions solve problems of lost or copied keys, reduce maintenance and minimize life-cycle costs.

REFERENCES

Vaasa Central Hospital, Lohja Hospital, Mehiläinen NEO and Kuopio University Hospital, Finland. Can Ruti Hospital and Vall d'Hebron University Hospital, Barcelona, Spain.

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BUSINESS FINLAND

iLOQ
Making life accessible

ITUGRAF RADIANT CEILING HEATING AND COOLING

OUR SOLUTION

Itula's ItuGraf is the leading heating and cooling solution for hospitals. A hydronic radiant ceiling panel, ItuGraf works to heat in a natural way as a radiant emitter and as a heat absorber when cooling. The product is a result of innovative high-quality Finnish R&D and production.

Radiant ceiling panels deliver outstanding energy efficiency. Compared to traditional systems, savings can reach more than 40%. The CE-approved panels are suitable for all energy sources. Panels integrate seamlessly into a suspended ceiling and do not attract dust or impurities. This is why most new Finnish private and public hospitals have been equipped with ItuGraf panels.

UNIQUENESS AND IMPACT

ItuGraf is an ideal heating and cooling solution that lowers carbon emissions and reduces energy consumption. The panels are manufactured from 100% recyclable materials. ItuGraf panels meet the strict hygiene requirements for hospital environments. Radiant ceiling panels effectively create a comfortable room temperature.

They are draft-free, noiseless, without particles in motion, thus significantly improving indoor climate. This contributes to better working conditions and a patient's welfare and recovery. An antibacterial surface treatment is also available.

COMPANY

Itula Oy is constantly developing energy-efficient heating and cooling solutions to save both energy and the environment.

REFERENCES

Itula Oy has delivered ItuGraf panels to most new Finnish hospitals.

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BUSINESS FINLAND

itula

A GLOBAL ENERGY TECHNOLOGY COMPANY

OUR SOLUTION

Oilon's focus technologies are industrial heat pumps and chillers, ground source heat pumps as well as burners and combustion systems for liquid and gaseous fuels in the capacity range of 10 kW–90 MW.

Our long-term expertise has culminated in our burners' efficient performance, reliability and low emission levels. Thanks to our vast experience in the combustion of various liquid and gaseous fuels, we are now able to offer our customers burners and burner technology in a wide capacity range. Our ChillHeat industrial heat pumps and chillers are suitable for a wide variety of cooling and/or heating of large real estate properties, industrial applications and in the production of district heating and cooling.

UNIQUENESS AND IMPACT

Our solutions and systems are used for heating and cooling large buildings and facilities and for heating private houses. Industrial customers include power plants, pulp and paper mills, process industry, waste incineration plants, marine operators and district heating plants. We specialize in environmental technology with a special emphasis on research and development. The focus of our research and development is on improving energy efficiency, decreasing emission levels and developing new solutions using renewable energy sources.

COMPANY

Oilon is a global energy and environmental technology company, founded in 1961. We operate in Finland, the US, China and Russia, and have sales offices in Brazil and Germany, plus over 70 resellers.

REFERENCES

Moinhos de Vento Hospital, Porto Alegre, Brazil. Weiss Memorial Hospital, the US. King Abdulaziz University Hospital (KAUH), Saudi Arabia. Beijing Railway Hospital, China.

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BUSINESS FINLAND

oilon®

ELECTRICAL SAFETY IN OPERATING ROOMS

OUR SOLUTION

PPO-Elektroniikka's MEV® Insulation Monitoring System provides constant, safe and secure monitoring of electrical systems in Group 2 medical premises, such as operating rooms. The MEV system has been protecting Finnish operating rooms since 1981. We are a pioneer in this field.

Faulty electrical equipment can be life-threatening for the patient and staff. Even the slightest equipment failure and leakage current can lead to burns, fire and even severe electric shock.

Detecting electrical problems at an early stage is an extremely important issue in the operating room. Our MEV system indicates faults and problems before dangerous situations arise. It is a matter of safety, efficiency and cost savings.

UNIQUENESS AND IMPACT

The MEV® Insulation Monitoring System protects patients and personnel from electric shocks, prevents electrical fires and burns and ensures a reliable supply of electrical power for all critical equipment.

The system makes certain that the operating room and equipment are efficiently deployed at all times and unnecessary downtime can be avoided. It also extends the service life of surgical equipment.

Our system is designed and manufactured in Finland. All our equipment is high quality, durable and designed based on sustainable development.

COMPANY

PPO-Elektroniikka Oy specializes in electrical safety. We have been building high-quality technology solutions for 40 years.

REFERENCES

We have delivered our MEV-systems to all Finnish hospitals. We started to export in 2020 with our new-generation MEV-8; we have distributors already in 17 countries.

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Medical Made in Finland by PPO
MEV-8
Insulation Monitoring System

BUSINESS FINLAND

RESIDUAL PHARMACEUTICALS IN WASTEWATER

OUR SOLUTION

Roxia has developed a unique, industrial-scale system that employs direct plasma treatment for non-selective oxidation of harmful pollutants in water. This advanced oxidation process effectively destroys antibiotics and other pharmaceutical residues in wastewater before they are mixed and diluted by municipal wastewater in the public sewer network.

Pharmaceuticals in the environment pose an emerging concern with a myriad of risks involved. One of the most adverse threats is the development of pathogen resistance against antibiotics. While putting a stop to the use of medication is not a realistic solution, new technological approaches are needed to tackle the problem.

UNIQUENESS AND IMPACT

A wide range of substances calls for non-selective treatment. In other words, all pharmaceuticals and their transformation products need to be treated. Plasma treatment relies on radical oxidation and is highly non-selective. Through its unique design, Roxia Plasma Oxidizer is the only scalable system offering radical oxidation by direct plasma contact. The process is efficient, chemical-free and backed by several scientific reports. Stopping pharmaceutical emissions serves to protect the environment and keep our antibiotics effective in the future as well.

COMPANY

Roxia delivers high-tech dewatering, industrial automation and environmental technologies. Our team offers specialized solutions in the mining, minerals, chemical, food and pharmaceutical industries.

REFERENCES

South Karelia Central Hospital full-scale pilot funded by the City of Lappeenranta and the Centre for Economic Development, Transport and Environment, Finland.

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BUSINESS FINLAND

ROXIA
PERFORMANCE — DRIVEN BY PEOPLE

SAVING WATER, TIME AND MONEY WITH SMART REPORTS

OUR SOLUTION

Smartvatten offers an innovation to digitize data collection without any changes to your water meters. Now you can measure, analyze and reduce your water consumption and leaks.

Our reports provide you with detailed insight into your water consumption, which we can use to help you create a clear water strategy to save water, time and money. Save 20% on your property's water costs by minimizing water consumption without compromising on convenience.

UNIQUENESS AND IMPACT

We are working with sustainable property owners to digitalize existing water meters. This allows for greater efficiency, prevents leaks and provides accurate real-time water data reporting that ensures better BREEAM, LEED or GRESB scores.

COMPANY

Founded in 2013, Smartvatten is committed to sustainability. We have grown from creating energy certificates to providing simple water-saving devices – and now on to facilitating the remote monitoring of water consumption.

REFERENCES

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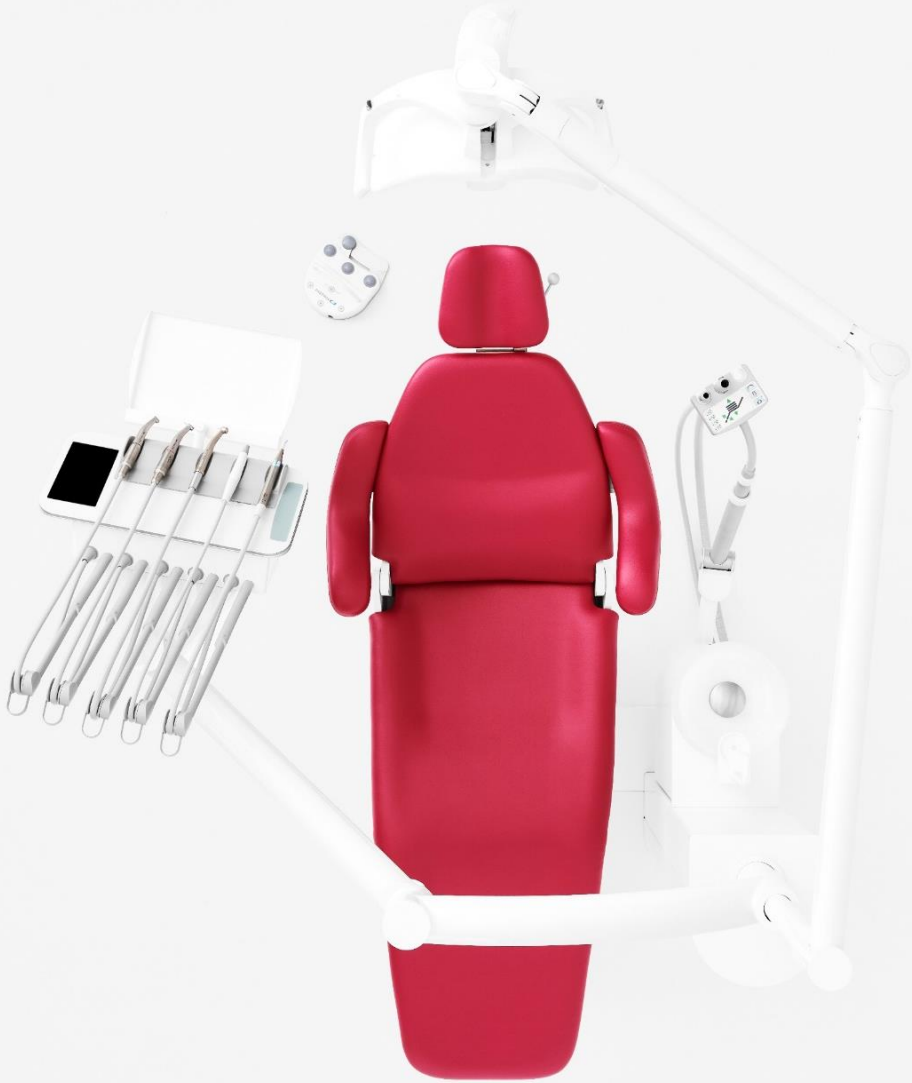
BUSINESS FINLAND

Smartvatten®

3. HOSPITAL INTERIORS

World-class safe hospital and clinic interiors, accessible spaces with antimicrobial surfaces, durable and modern high-quality equipment as well as recovery technologies to ensure healing environments and optimal occupational spaces.

Finndent
GoSleep
Hublet
Isku Interior
Korpinen
Light Cognitive
Lojer
Medirit
Monidor
Neurosonic Finland
Oras
Yetitablet/Kuori



A MODULAR AND UPDATABLE DENTAL UNIT

OUR SOLUTION

Finndent's Q units are designed and manufactured to last the entire career of a dental professional. Not only is the unit made of long-lasting full metal parts, but the modular design allows the unit to be updated with the newest technology for years after installation.

Currently, the Q product family consists of three models – Q2, Q8 and Q10. Every unit that we sell is fully tailor-made to our clients' specific needs. It is assembled by hand to ensure the highest possible quality.

UNIQUENESS AND IMPACT

We are also constantly developing new business models based on circular economy principles. Our new Q units are designed to be modular, repairable and updatable. They are made to stay in use for as long as possible. Sustainability for us means durable quality and intelligent design that allows you to consume less.

Rethinking dental units means expanding the services we provide for our customers beyond just selling them a new unit. With the right maintenance, repairs and updates, a dental unit can last the entire career of a dental professional.

COMPANY

Finndent is a Finnish company that has been creating innovative dental solutions for more than four decades. We develop, design and assemble high-quality dental units for a variety of customers.

REFERENCES

Academic Centre for Dentistry Amsterdam (ACTA) Amsterdam, the Netherlands. Haartman Hospital Helsinki, Finland.

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BUSINESS FINLAND

FINNDENT

REST IS MORE

OUR SOLUTION

GoSleep Powernap Pods provide a fully private space to have a short and efficient rest in a relaxed environment – supported by the company. Why would someone take a rest during a shift? We did a study showing that only a 15-minute stay in a GoSleep Pod starts your recovery process and reduces your stress levels. This helps you become more alert, more focused – and improves your cognitive functioning. Power naps have been proven to increase productivity and concentration by 36%. An improvement like this is a huge benefit. An efficient 15 minutes in the GoSleep Pod does not take anything away from anyone – quite the contrary. Providing pods for your organization is an investment in better results, productivity and happier people.

UNIQUENESS AND IMPACT

GoSleep Pods provide a private space to rest for frontline medical staff. They can enhance your organization's performance, focus and productivity.

Our pods increase overall wellbeing and create positive thoughts toward an employer.

Having GoSleep Pods sends a genuine message that your organization takes your staff's wellbeing seriously. They prevent exhaustion and reduce sick leave.

Each pod fits into a small unused space. They offer flexibility for various office space arrangements. The pods are easy to keep clean and hygienic.

COMPANY

GoSleep manufactures, sells and operates sleeping pods around the world. You can rest and recover in full privacy – we provide it anytime and anywhere!

REFERENCES

GoSleep Pods are in over 40 hospitals. Organizations such as NHS, OLVG, LUMC, AmphiA and many more have integrated pods as a part of their everyday life.

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BUSINESS
FINLAND

GoSleep

BUSINESS
FINLAND

TABLET SOLUTION FOR HEALTHCARE

OUR SOLUTION

Hublet's service allows equal and easy access to digital content and services for everyone. Hublet enables customized content to be digitally delivered to different kinds of services, such as hospitals and senior centers, libraries, science centers, museums and the hospitality segment.

Our solution is an automated self-service solution for managing fleets of tablets that improve a patient's wellbeing and save staff time. It contains the user-friendly cloud-based Hublet Manager management software, effective Hublet Tablets and Hublet Smart Docking Station.

UNIQUENESS AND IMPACT

The Hublet solution enables healthcare users and staff to access digital content in a smooth, reliable and secure way – whether in the day room or by the sickbed.

Sharing devices as a service empowers healthcare users with training and communication apps. The solution is easy to use as a customized learning and communication tool.

It is also safe to use with bacteria and virus-free touch surfaces.

The solution provides data and device security for theft prevention. It offers easy access to accurate medical information.

COMPANY

Currently, we operate in 25 countries with over 700 happy customers.

REFERENCES

Laakso Joint Hospital, Tampere Heart Hospital and the South Savo Social and Health Care Authority (Essote), Finland.

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hublet
SHARING DIGITAL WORLD

WORLD-CLASS HEALTHCARE INTERIORS

OUR SOLUTION

Advances in material science play a significant role, especially in indoor hygiene management. In public spaces, we are constantly exposed to contaminated contact surfaces, and there are concerns about health and safety. The cleaner the environment, the lower the risk of infection. ISKU has developed the world's first antimicrobial furniture collections to reduce the spread of infections and create a more hygienic environment. The proven and research-based ISKU+ antimicrobial materials reduce microbes by up to 99.99% creating cleaner, healthier multi-user environments for healthcare, working and learning. All furniture manufactured by ISKU is available as antimicrobial.

UNIQUENESS AND IMPACT

Choosing antimicrobial furniture solutions is a long-term investment in health and well-being. It also conveys a firm signal of caring. To ISKU, bringing sustainability to the forefront of design comes naturally. ISKU prefers environmentally sustainable materials and manufacturing methods.

This comes to life, for example, through the company's certified quality (ISO 9001) and environmental systems (ISO 14001) and by employing the certified tracking system for wood origin (PEFC CoC) to support sustainable forestry.

COMPANY

ISKU is a Finnish family-owned company established in 1928 in Lahti, Finland. The company is a forerunner in furnishing healthcare facilities with the most modern solutions that combine Finnish expertise in healthcare, cutting-edge technology, circular economy thinking, and world-class design.

REFERENCES

ISKU has designed and furnished interiors for several healthcare facilities in Finland and internationally. Coxa Hospital for Joint Replacement Tampere, Finland. HUS Helsinki University Hospital, Finland. Pediatric department of Acibadem Maslak Hospital, Istanbul, Turkey.

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ISKU
Since 1928

BUSINESS
FINLAND

ACCESSIBLE BATHROOM SOLUTIONS

OUR SOLUTION

Korpinen offers a large range of products for bathrooms, including high-quality washbasins, handrails, support rails, shower seats, dispensers and other accessories.

Korpinen has extensive know-how of user needs and various solutions of accessible bathrooms. We offer excellent planning tools with a comprehensive 2D and 3D object library, a large selection of layouts and consultancy during the projects.

UNIQUENESS AND IMPACT

Safety, independence and dignity of the users in care homes and hospitals have been our leading goal when developing Korpinen bathroom layouts and products. Korpinen bathroom solutions provide independence for users by decreasing the need for assistance. They enable a faster rehabilitation and fewer days in the hospital along with preventing healthcare-associated touch-based infections with antimicrobial surfaces. Korpinen products are designed to be sustainable with a long life cycle.

COMPANY

Korpinen is a Finnish pioneer in accessibility solutions. Korpinen offers high-quality, customizable bathroom solutions as well as aids and other barrier-free solutions for various environments.

REFERENCES

Helsingborg Hospital Skåne, Sweden. Køge Hospital, Denmark. Espoo Hospital, Turku University Hospital T2 building and Vaasa Hospital, Finland.

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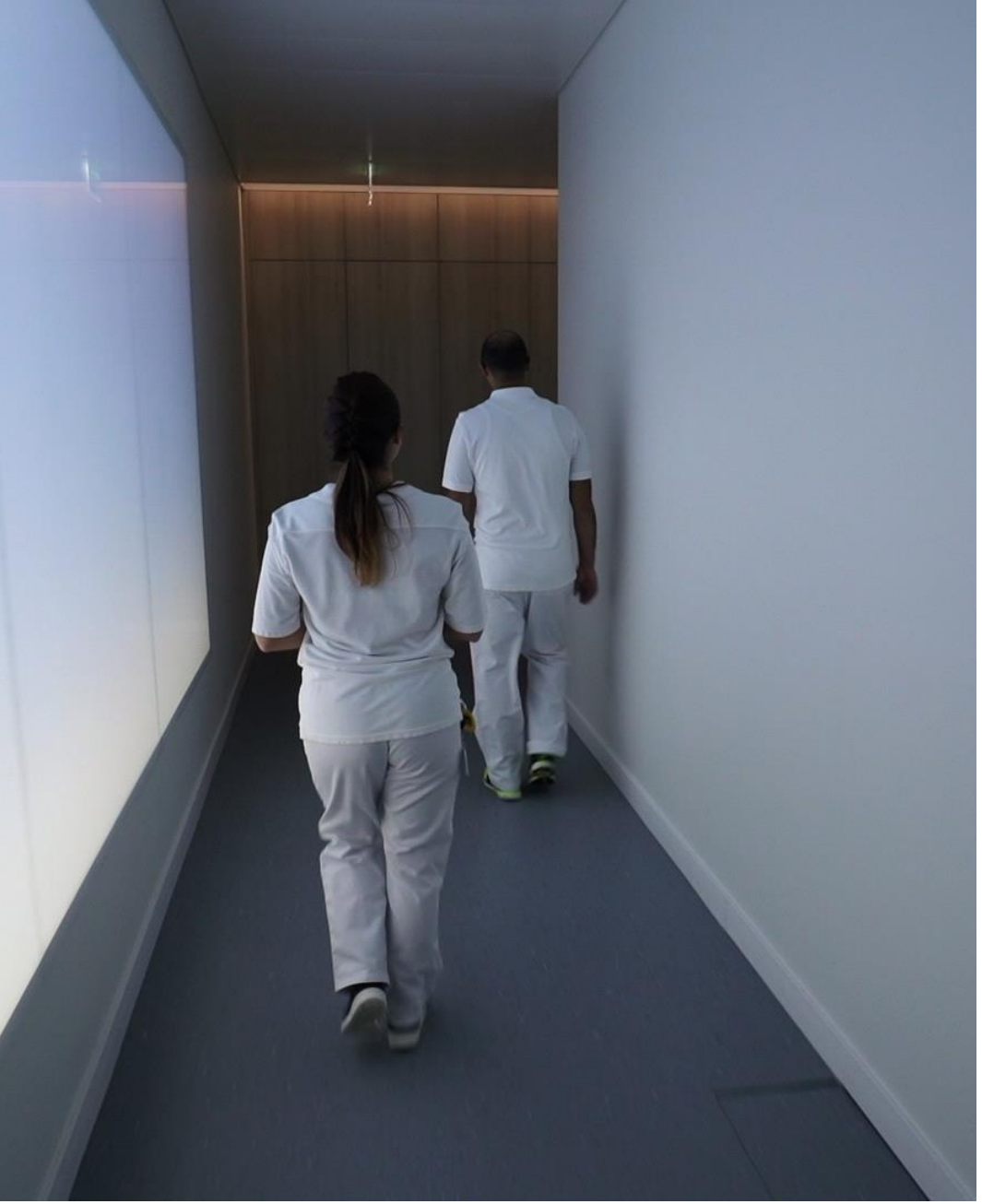
BUSINESS FINLAND

KORPINEN



HUMAN-CENTRIC LIGHTING SOLUTION

OUR SOLUTION

Light Cognitive (LC) is a Nordic innovation created to overcome darkness. Natural light lifts our mood, affects our sleep and improves our health. LC can reproduce human-centric natural light with a patented LED innovation that follows nature's circadian rhythm.

Our lighting lessens feelings of claustrophobia and fatigue, bringing illumination and joy to dark spaces. We specialize in recreating all forms of natural light. Our versatile, award-winning installations bring the sky to any interior.

UNIQUENESS AND IMPACT

LC lighting mimics natural light closely, spectrally and visually, thus bringing the benefits of natural light and robust circadian rhythm to all spaces. Our human-centric LED lighting is an energy-efficient way of illuminating. Our innovative and versatile lighting, developed with our scientific advisor Dr. Steven Lockley, Harvard Medical School –and with the WELL Standard in mind –is ideal to improve patient experience and the daily wellbeing and performance of health personnel.

COMPANY

Light Cognitive is a Finnish lighting tech company that exports to Europe. LC reproduces human-centric natural light with a patented, award-winning LED innovation that follows circadian rhythm.

REFERENCES

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BUSINESS FINLAND

LC
LIGHT COGNITIVE

FOR EASY CARE

OUR SOLUTION

Lojer, a Finnish medical furniture specialist, designs and manufactures hospital equipment to serve healthcare professionals in demanding environments. Our product range includes hospital and nursing products, operating tables and physiotherapy products. In fact, we offer one of the market's widest selections of high-quality electrical and hydraulic treatment tables.

Manuthera® 242 is the most versatile treatment table in the world. It features unique patented technology designed by Finnish experts. We manufacture our products in Finland to ensure consistent high quality using the latest design innovations and manufacturing technology.

UNIQUENESS AND IMPACT

We design high-quality products that last. This has significant environmental, economic and social impact. Our products focus on ergonomics, safety and hygiene. Our product development processes start with investigating real-life challenges in healthcare environments. All our products are solutions to challenges faced by professionals and are designed in cooperation with experts. The safety of patients and hospital professionals is one of the most important drivers in our development work.

COMPANY

Finnish Lojer Group is the largest manufacturer of medical furniture in the Nordic countries. Lojer's production units are located in Finland. The company operates through partners in over 100 countries.

REFERENCES

Helsinki University Hospital, Finland. Karolinska University Hospital, Sweden. Oslo University Hospital, Norway.

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BUSINESS FINLAND

LOJER® For easy care

ERGONOMIC ACCESS TO MOBILE DEVICES

OUR SOLUTION

Medirit's idea of a product line named Salko came from the urge to help recovering patients have easy access to their loved ones and save the time of caretakers.

Salko gives patients ergonomic access to mobile devices. It is designed specifically for regulated hospital use. Salko can be used as a functional part of existing hospital furniture. Any mobile devices provided by the hospital or the patient's own device can be easily and effortlessly attached to Salko. The most important cornerstone of Salko design is hygiene. Salko is easy to clean and keep clean – and is very safe to use. Salko is an ideal solution for both the patient and medical staff.

UNIQUENESS AND IMPACT

Is there anything you wouldn't do to help a recovering family member have a more pleasant everyday life? There is a significant impact on the recovery of a patient when that patient feels safe and cared for by loved ones. The work of the medical staff is very hectic, and only a limited number of resources are available for any one patient. Therefore, it is essential to develop a way to save valuable staff time.

COMPANY

Medirit Ltd was founded in 2019 to impact the recovery of patients by making them feel safe and cared for by their loved ones.

REFERENCES

HUS New Children's Hospital, Kymenlaakso Central Hospital (KymSote) and Jorvi Hospital's Pediatric Advanced Home Care, Finland.

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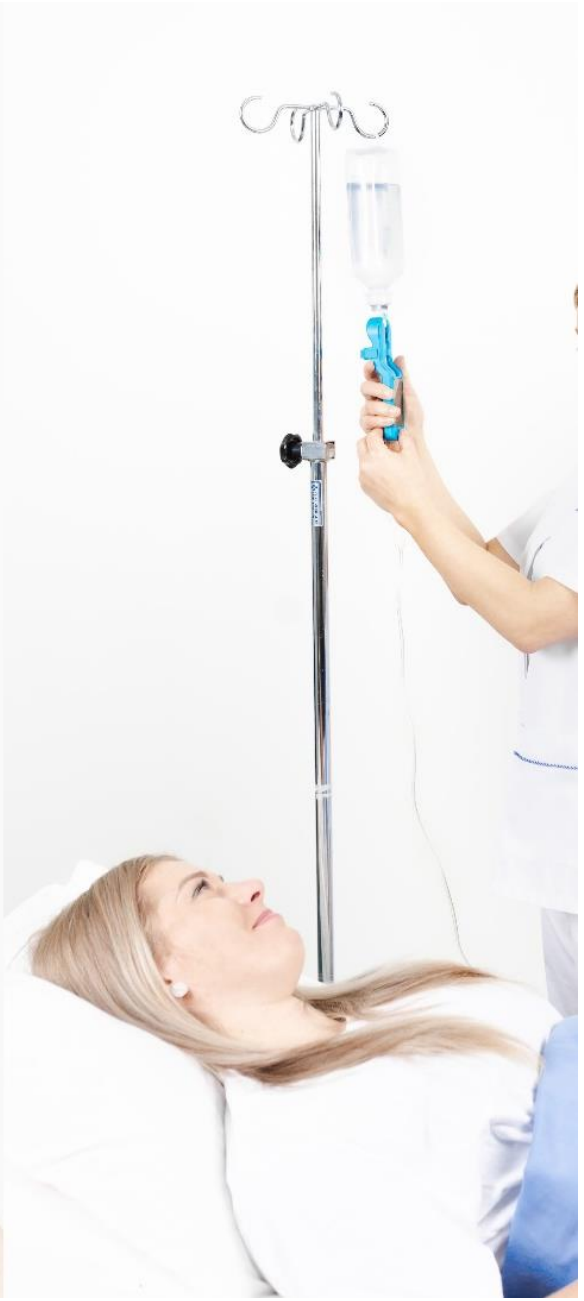
BUSINESS FINLAND

MEDIRIT



SAFER IV THERAPY WITH REMOTE MONITORING

OUR SOLUTION

Monidor helps hospitals mitigate errors in infusion therapy and reduce the workload of nurses on hospital wards. Our solution is remote monitoring of infusion therapy with our compact Monidrop infusion meter. About 90% of hospitalized patients receive infusion therapy in some form. Two-thirds of infusion therapy is gravity based and manual, which is prone to errors. The remaining one-third is given with infusion pumps. Inaccurate infusion therapy causes complications, longer hospital stays and even increased mortality. Hospitals are working under enormous pressure. The lack of nurses adds to the problems facing patient care. Monidor aims to mitigate errors and reduce the workload of infusion therapy.

UNIQUENESS AND IMPACT

Monidor's unique remote monitoring helps detect and mitigate errors in gravity-based infusion therapy. We have conducted an effectiveness study that analyzed data from 12 departments in 6 Finnish hospitals. Based on this data, it is possible to evaluate the potential impact of the Monidor solution.

As an example, in a department with 3 daytime, 3 evening and 2 night-shift nurses, Monidor use resulted in more than 400 fewer routine room visits, over 326 infusion completions detected, more than 74 impending line blockage cases avoided and more than 20 hours in nursing time saved.

COMPANY

Monidor is a Finnish health technology company founded in 2015. Our mission is to help the work of nurses and improve patient safety with easy-to-use, innovative solutions.

REFERENCES

Helsinki University Hospital, Kuopio University Hospital and Oulu University Hospital, Finland. University Hospital West Suffolk, the UK.

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BUSINESS FINLAND

MONIDOR

TECHNOLOGY FOR BETTER RECOVERY

OUR SOLUTION

Neurosonic provides a break and nap room for good sleep health, a stressless life and holistic recovery.

UNIQUENESS AND IMPACT

The patented Neurosonic technology stimulates the body and nervous system so that your restorative and recovery functions start up quickly and comfortably. Our technology also promotes metabolism and fluid circulation, making the effect even more holistic.

The built-in elements transmit a horizontal vibration to certain parts of the body or the whole body simultaneously. The technology produces a pure sine wave in a range under 100 Hz. The technology is available as Neurosonic-branded chairs, beds, divans and mattresses. The effects of Neurosonic technology can be seen from heart rate variability (HRV) measurements, among others.

COMPANY

The environmental impact of our product is the ability to create stress-free zones in hectic hospital surroundings. From a social point of view, people who stress less are happier, have better ability to work and are more cooperative.

Economically, our solution decreases sick leave and increases work efficiency. Neurosonic was established in 2010 with offices in Finland and Sweden. We have partners in the UK, the Netherlands, Denmark, Qatar, the US and Norway.

REFERENCES

Whipps Cross University Hospital, London, the UK. Oulu University Hospital, Satakunta Central Hospital, East Savo Hospital and Vaasa Central Hospital, Finland. Erasmus MC Rotterdam, the Netherlands.

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BUSINESS FINLAND

NEUROSONIC®

FAUCETS FOR HOSPITALS AND HEALTHCARE UNITS

OUR SOLUTION

Oras hospital and care faucets are optimized for the specific needs and demands of different healthcare facilities, like hospitals, clinics, assisted living facilities and day care centers. They have been developed in close cooperation with healthcare professionals.

Oras faucets are packed with features, such as touchless technology, hygienic flushing, laminar flow and anti-scald technology. These are designed to meet the high hygiene and safety standards of healthcare facilities.

UNIQUENESS AND IMPACT

Oras specializes in the production of high-quality and innovative sanitary fittings for both private and public use. The Oras Group has over a hundred years' heritage of providing safe, convenient and sustainable access to water for everyone.

COMPANY

Oras makes water experiences smart, convenient, safe and sustainable for the benefit of people, businesses, society and the environment.

REFERENCES

Quality is in the details at the New Children's Hospital in Helsinki.

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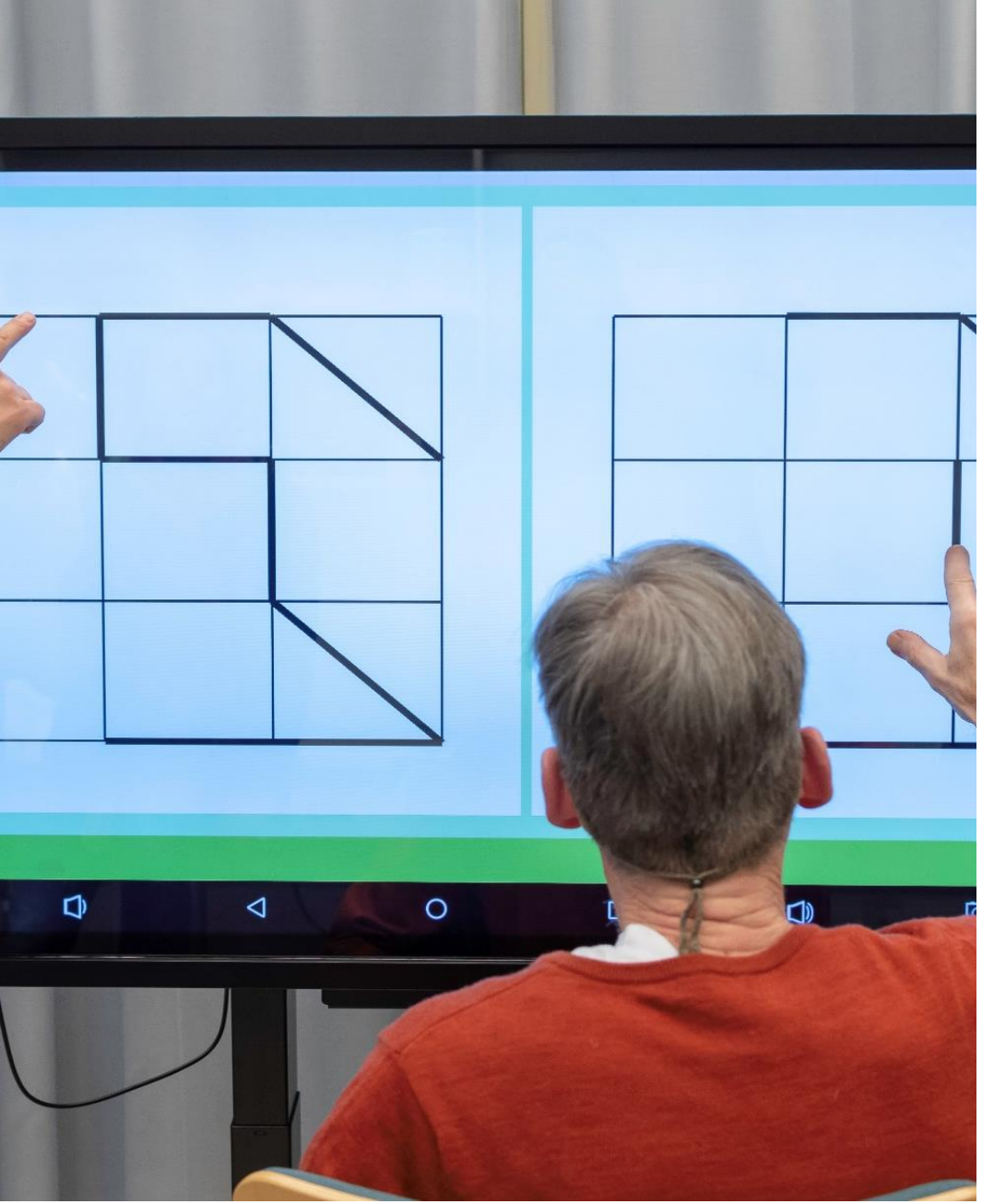
BUSINESS
FINLAND



GIANT ANDROID TABLET FOR REHABILITATION

OUR SOLUTION

Kuori's YetiCare combines an impressive screen size with a universe of therapeutic apps for rehabilitation. Yetitablet is equipped with 4-mm tempered safety glass so it can endure rough handling. The preferred screen size for rehabilitation is 55" or 65", which provides many possibilities for motoric exercise and for group therapy.

YetiCare easy-to-use user interface is designed for people with special needs. It is built on the familiar Android operating system. YetiCare offers tens of applications designed to train fine motor and coordination skills, as well as cognitive and social skills. We work in close cooperation with healthcare professionals and specialists in app development.

UNIQUENESS AND IMPACT

YetiCare brings joy and motivation to rehabilitation. Our customers tell us that patients look forward to rehab moments with YetiCare.

Patients and caregivers alike share lots of laughs during exercise. YetiCare increases versatility during rehab. It offers a wide range of possibilities for different exercises, which are also easy to organize for the caregiver.

The Android device, combined with the app universe, can be used in multiple ways. This helps make the investment more economical, eliminating the need for acquiring multiple specialized devices.

COMPANY

Kuori is a high-tech company founded in 2015 by Maria and Jarkko, parents of three children with an autism spectrum disorder. They discovered how a giant tablet can help people communicate and concentrate.

REFERENCES

HUS Lohja Hospital, Neurology Rehabilitation Outpatient Clinic, Finland. Danderyd Hospital, Rehabilitation Medicine Clinic, Stockholm, Sweden. Both specialize in cerebrovascular disorders.

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BUSINESS FINLAND

yeti TABLET

4. HOSPITAL LOGISTICS AND HOSPITAL OPERATIONS

Patient flow and wayfinding, optimizing waste management, closed-loop medication and closed-loop workwear solutions along with better patient transfer plans.

Axel Health
Citynomadi
EagleData
Ecosir Group
Goodmill
Hygga
Idesco
Mediclaudo
NewIcon
Touchpoint
CareCare
Unitary Healthcare
Verso

BUSINESS FINLAND

POWERFUL PATIENT FLOW MANAGEMENT SOLUTIONS

OUR SOLUTION

Axel Health builds humane technology to enable superior healthcare experiences. We bring healthcare professionals an effective suite of digital tools to manage patient flows and resourcing. Our digital self-service solutions ensure smooth and streamlined patient experiences while reducing the daily stress and rush for healthcare professionals. Healthcare personnel can monitor and control the treatment process and patient flow in real time. Together with real-time patient flow management and guidance, our intuitive planning tools bring efficiency to work shift planning as well as room and device bookings.

UNIQUENESS AND IMPACT

With Axel, hospitals are able to achieve an over 90% automation rate in patient guidance and self-service. Our solution guides and instructs patients and personnel in all phases of the visit. Getting rid of routine tasks allows personnel to focus on valuable treatment work. Our complete solution brings hospitals up to 4.5-fold benefits compared to the investment made in our service.

The data collected by the system can be used to improve and optimize the organization's day-to-day operations.

COMPANY

Axel Health is the leading healthcare patient flow solution provider in Finland, and we're expanding our footprint in Europe. Our current customers are hospital districts and the biggest municipalities.

REFERENCES

Hospital District of Helsinki and Uusimaa (HUS), Northern Ostrobothnia Hospital District (PPSHP) and Lapland Hospital District (LSHP), Finland.

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BUSINESS FINLAND

AXEL HEALTH

WE ENPOWER THE HOSPITAL CAMPUS IN WAYFINDING - ASK US WHERE TO GO!

OUR SOLUTION

Citynomadi provides a seamless and virtual hospital approach and indoor wayfinding without any installation.

UNIQUENESS AND IMPACT

The ease of implementing the service makes our solution unique. There is no need to integrate it with hospital systems so that privacy is respected.

Our service helps patients, maintenance personnel, visitors and employees navigate the first and last mile easily. It has been estimated that each NHS hospital loses GBP 0.5 million annually in missed doctor appointments. Our service also lowers the carbon footprint of the hospital as an organization.

COMPANY

Citynomadi visualizes operations and wayfinding in hospital sites an buildings. Our SaaS solution is a global, multilingual, provides real-time data by API data source, easy to update, GDPR complient. Most of all it covers indoors covering all floors and outdoors alike.

REFERENCES

Tampere University Hospital, Kuopio University Hospital, Oulu University Hospital

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BUSINESS FINLAND

SMART AUTONOMOUS MOBILE ROBOT FOR HOSPITALS

OUR SOLUTION

Eagle Data`s TUG delivers materials, such as medication, lab specimen, food, linen, trash and waste inside hospital. It has a measurable ROI and provides tangible improvements in care. TUG works around the clock. It is a substitute for the labor needed to transport materials within the hospital. TUG is a visible investment as it travels the halls, rides elevators and audibly speaks while performing its tasks. TUG has a map of the hospital stored in its memory and uses a scanning laser, infrared and ultrasonic sensors to detect and model the environment in real time to maintain accurate position and avoid obstacles. TUG automatically returns to its charging dock after completing a delivery.

UNIQUENESS AND IMPACT

Staff can spend more time with patients or assist nursing instead of transporting goods, which translates into better care and improved patient satisfaction. When staff is not distracted looking for missing materials or medication, mistakes can be avoided, and patient care does not suffer.

The automated system helps increase work efficiency and staff comfort while bringing cost savings to internal logistics. Hospitals that use TUG improve efficiency and allow staff to focus on higher-touch patient care and value-added services.

COMPANY

Eagle Data Ky, a privately own company located in Kotka, Finland, was established in 1983. We are the official TUG mobile robot system distributor and integrator in the Nordic and Baltic countries.

REFERENCES

The Hospital District of South Ostrobothnia, Finland. Ten TUGs are operating 24/7/365 in the hospital with 460+ beds. The first TUGs were delivered in 2016.

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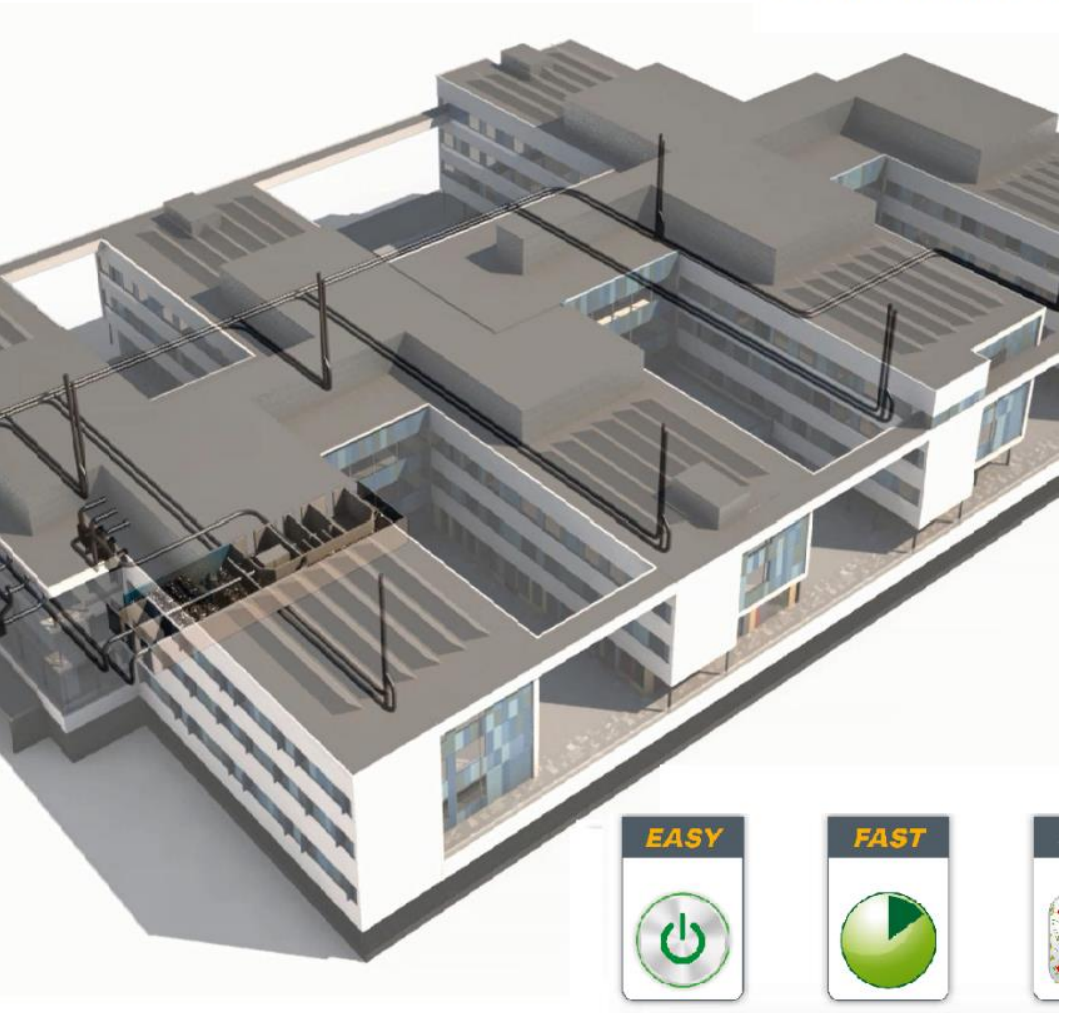
BUSINESS FINLAND

EagleData



PNEUMATIC WASTE AND LAUNDRY SYSTEM

OUR SOLUTION

Ecosir Group offers its automatic vacuum transfer technology CAREMASTER™ as the most efficient solution to improve hygiene and logistical efficiency 24/7.

A modern hospital needs to offer the best care with the highest level of hygiene. Several tons of dirty linen and waste must be removed from wards and operating rooms and processed quickly.

UNIQUENESS AND IMPACT

The solution improves hygiene and prevents cross-contamination as it eliminates waste, removes full linen bins and reduces staff movement along corridors and elevators.

CAREMASTER is hygienic. It restricts coronaviruses, MERS, bacteria and viruses and eliminates odor.

It is also economical, as there is no need for extra service elevators or waste bins, bringing savings in labor costs. The solution saves space, since no additional waste or linen storage is needed.

The solution supports the circular economy. Waste sorting and recycling are key to CE certification.

COMPANY

Ecosir Group provides advanced automated vacuum waste and laundry transfer solutions (PWCS) for hospitals and cities.

Since 1987, we have delivered over 100 large-scale and nearly 1,000 smaller systems.

Our headquarters and operations are located in Espoo, Finland. We have 15 locally certified official partners across the world.

REFERENCES

Sun Yat-sen University and Zhongshang University Shanghai, China. Adan, Kuwait City., Kuwait. Tartu University, Estonia. Helsinki University District and The Hospital District of South Ostrobothnia, Finland.

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BUSINESS FINLAND

ECOSIR GROUP

AMBULANCES ALWAYS ONLINE

OUR SOLUTION

Goodmill Systems provides highly reliable broadband connectivity for ambulances and similarly demanding applications. Our multichannel routers join several separate telecommunications networks into a single logical connection.

The connection formed has the combined features of the underlying networks, including reliability, coverage and throughput. The networks can be anything supporting IP traffic, from cellular LTE and 5G to satellite communications.

UNIQUENESS AND IMPACT

Our multichannel approach enables all ICT systems to function reliably while on the move without massive nationwide investments in dedicated networks.

For example, paramedics can bring specialized medical expertise through telemedicine directly to emergency sites, cutting unnecessary patient transport to and from hospitals and unnecessary hospital admissions.

COMPANY

Goodmill Systems is an expert in critical communications, designing and delivering multichannel routers for broadband critical communications.

REFERENCES

Finnish Red Cross
Pirkanmaa Hospital District
Hospital District of Helsinki and Uusimaa HUS,
Jokilaakso Fire & Rescue Department
The Thales Group
Global Projects (Kuwait)

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BUSINESS FINLAND

GOODMILL Always online

BETTER AVAILABILITY FOR HEALTHCARE SERVICES

OUR SOLUTION

Hygga offers its customers a new way of providing healthcare services by making smart use of staff resources and leading through information. The real-time resource planning tool increases internal efficiency across private and public sectors and benefits both doctors and patients. At the core of the solution is determining treatment time according to the identified need for care. Instead of treating only one symptom, the patient's overall health can be examined in one visit. Through the Hygga Flow solution, relevant professionals can be invited to participate in the treatment, which reduces the need for new appointments and shortens the patient's treatment period.

UNIQUENESS AND IMPACT

Hygga Flow enables flexible treatment times according to the individual's need for care. It also facilitates patient flow, which shortens treatment periods and waiting times. As treatment lines shorten, the availability of healthcare services improves, and patients have faster access to care.

Hygga Flow creates an excellent framework for a stress-free work environment for personnel. Professionals truly have time for their patients. With the same resources, doctors can provide 24 % more care compared to a traditional model.

COMPANY

Hygga, founded in 2010, is a Finnish pioneer in digital services for healthcare services. Hygga develops modern and innovative real-time resource planning solutions for the healthcare sector.

REFERENCES

Hygga Flow is in use in dental health care units in Finland, Sweden, Netherlands and Belgium. In general healthcare, the solution is in use in the city of Porvoo .

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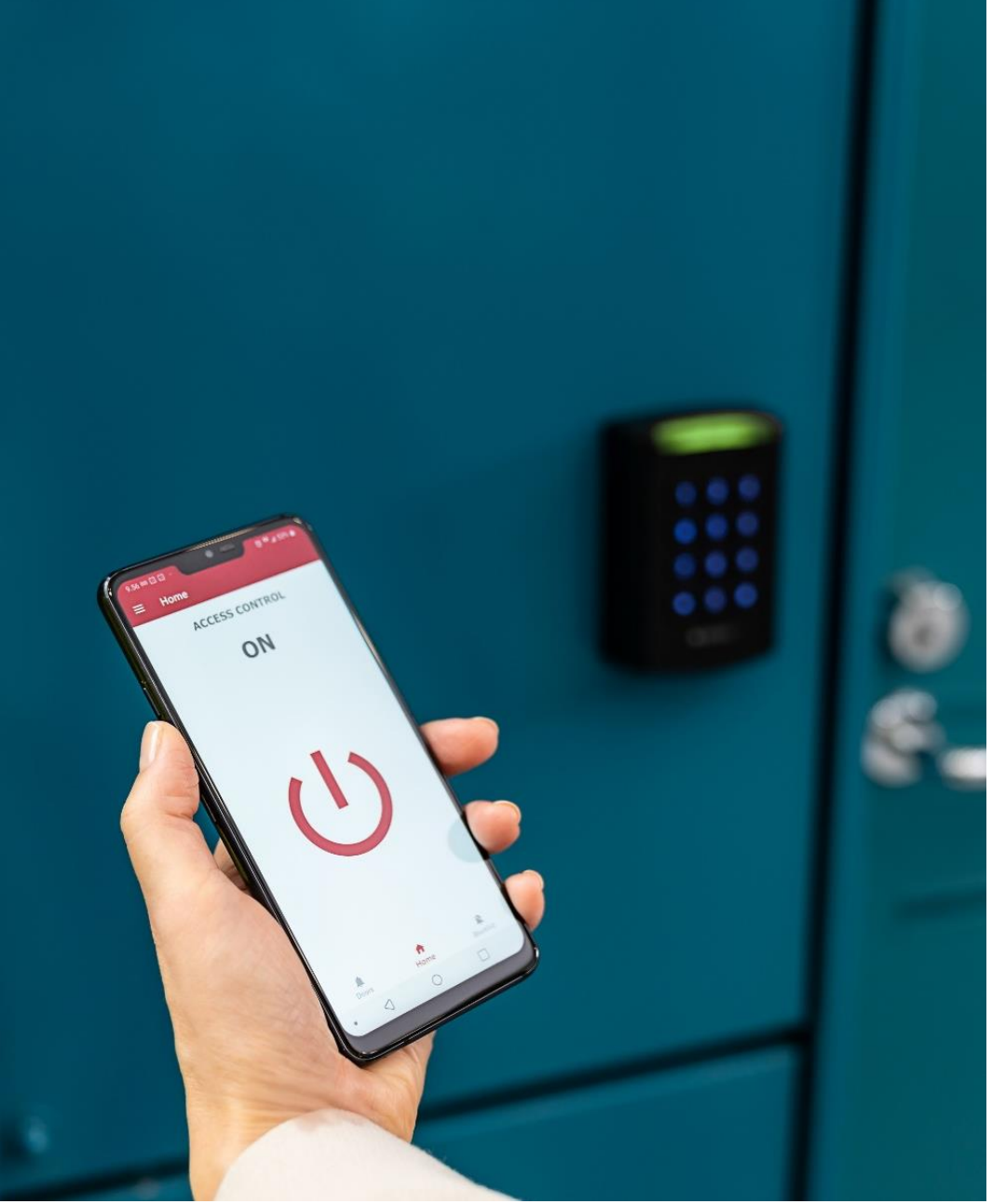
BUSINESS FINLAND



MOBILE ACCESS CONTROL SOLUTIONS

OUR SOLUTION

Idesco offers the easiest, most cost-effective solution for bringing hygienic, hands-free access control to your hospital through mobile phones. Our products, readers and mobile apps seamlessly integrate into your existing access control system. They support both hygienic, touchless access at adjustable detection ranges and secure mobile access protocols. The creation, managing and sending of access credentials to mobile phones can be done entirely within a hospital's existing access control system. How? Idesco mobile access solutions do not require a separate system or third-party cloud application. This makes deployment simpler while reducing user privacy concerns.

UNIQUENESS AND IMPACT

Idesco mobile access products aren't just convenient for security managers. They are easy and simple for users, too, who do not need to manually enroll their phones. They can receive credentials from the hospital before they enter.

Our credential management service, Idesco ID, does not need a cloud application. Instead, it works alongside your own system. Our readers also provide significant energy savings on their own. Finally, Idesco ID robustly protects its users' privacy, as it never stores their contact information.

COMPANY

Idesco, one of the world's oldest, most experienced RFID companies, provides access control readers for healthcare settings, other industries and customers globally.

REFERENCES

Idesco's public hospital case study

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BUSINESS FINLAND

IDESCO

PLATFORM FOR TRACEABLE MEDICINE DISTRIBUTION

OUR SOLUTION

Mediclaudo has developed a platform that utilizes intelligent digital solutions and automation in products and services. The first product to use the platform is Mediclaudo Smart Medicine Trolley, which was developed together with a Finnish hospital to enhance its medicine logistics processes.

With Smart Trolley, medicines can be moved in a locked cabinet from a pharmacy to the hospital and all the way to the patient. The cabinet can be opened only by authorized personnel and is moved using robots. The locking system of the trolley can be integrated with the RFID feature of personnel identity cards.

UNIQUENESS AND IMPACT

Mediclaudo's Smart Medicine Trolley ensures that the right medicines are distributed at the right time, in the right place. It enables traceability, tracking and secure medicine distribution. This provides expansion opportunities for hospital systems.

COMPANY

Mediclaudo Oy is a Finnish growth company with solid roots in providing hospital equipment.

REFERENCES

The Hospital District of South Ostrobothnia.

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BUSINESS FINLAND

MEDICLAUDO

FINNISH PHARMACY AUTOMATION

OUR SOLUTION

NewIcon provides state-of-the-art pharmacy automation solutions such as automated dispensing systems (Fixu), automated dispensing cabinets (eMED ICON), multipurpose compounding platforms (IV ICON Twins). We also provide integration and localization packages, lifetime-care services, and licensing. Our automation solutions help hospital pharmacists save time, reduce picking errors and monitor inventory value and medicine expiration dates in real-time.

UNIQUENESS AND IMPACT

Our automation solutions are built using the most premium materials on the market. The average life cycle of any system is 10–15 years, making it a sustainable choice for hospital pharmacies in the long run. The systems, equipped with real-time inventory monitoring, greatly reduce the risks of human error in the handling of medicines. Medication management is, therefore, much safer for both hospital staff and patients.

COMPANY

Founded in 2007, NewIcon quickly became a market leader in the pharmacy automation industry, especially in Finland and Israel. We are committed to helping hospitals and hospital pharmacies achieve the utmost efficiency, safety, and uninterrupted pharmaceutical service with our automation solutions.

REFERENCES

Our customers include Helsinki University Hospital, Kuopio University Hospital, Tampere University Hospital, Toulouse University Hospital, Hospital Nova, Rambam Hospital, and many others. You can read more about our references from our website: https://newicon.fi/ .

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NEW ICON

-we help people to help people-

BUSINESS FINLAND

CLOSED-LOOP WORKWEAR SOLUTIONS

OUR SOLUTION

Touchpoint offers functional, high-quality and sustainable workwear solutions and closed-loop services for textiles. We provide a wide selection of garments for professionals in the healthcare industry and focus on finding the most environmentally preferred materials for our collections. We believe that if you produce something tangible for this planet, you must have a sustainable and solid solution of how to dispose of it. We are committed to taking back all textiles we deliver to our customers and recycling them into new textile fiber in our own textile recycling plant Rester in Paimio, Finland. Furthermore, our goal is to use this fiber in the production of new workwear.

UNIQUENESS AND IMPACT

The Rester circular economy plant is unique in Scandinavia when it comes to textile recycling and producing new raw material for industrial needs. It receives end-of-life textiles from companies and processes the fibers into new, high-quality raw material.

The initial capacity of the plant is 6,000 tons per year, and it started operations in October 2021. To close the loop for workwear, Touchpoint has signed a contract with a reputable European fabric supplier to utilize Rester recycled fiber for healthcare workwear fabric production by the end of 2023.

COMPANY

The Touchpoint Group consists of the Touchpoint Oy workwear business and the Rester Oy textile recycling business in which Touchpoint and its partners have made notable investments recently.

REFERENCES

Kuopio University Hospital and Tampere University Hospital, both acquired through Sakupe Oy's tendering process. More references to be published soon.

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BUSINESS FINLAND

TOUCHPOINT
Sustainable Workwear

INSTANT GRIP SOCK TO PREVENT SLIPPING

OUR SOLUTION

CareCare is the only company in the world that prevents slipping on wet and dry indoor surfaces. Falls are daily accidents in healthcare. Hip replacement surgery, anesthesia and a 4-day hospital stay are estimated to cost about €22,500 and can be as much as €110,000 for one fall. In Finland, the cost of falls is €1 million a year.

Our solution minimizes the risk of slipping while walking on floors and wet surfaces. Competitors are hospital shoes and non-slip socks. However, hospital shoes do not fit every foot, and non-slip socks lose their non-slip feature after a few washes.

UNIQUENESS AND IMPACT

CareCare Instant Grip Sock prevents slipping on wet and dry indoor surfaces. The sock is functional and comfortable. The socks are a great fit both on bare feet and over other socks. The Grip Sock is a personal, disposable product for a patient. They have been designed for environmentally friendly care, as the socks can be recycled by burning into energy.

The material used in the sock meets medical standards and is latex-free. The socks have the CE marking and are patent pending.

COMPANY

CareCare is a company manufacturing social and health sector products. Our business idea is to develop and manufacture environmentally friendly, cost-effective products that facilitate patient movement.

REFERENCES

Helsinki, Oulu, Tampere and Turku University Hospitals, Lapland, Vaasa and South Karelia Central Hospitals, Kaarina and Ylivieska Hospitals, Finland.

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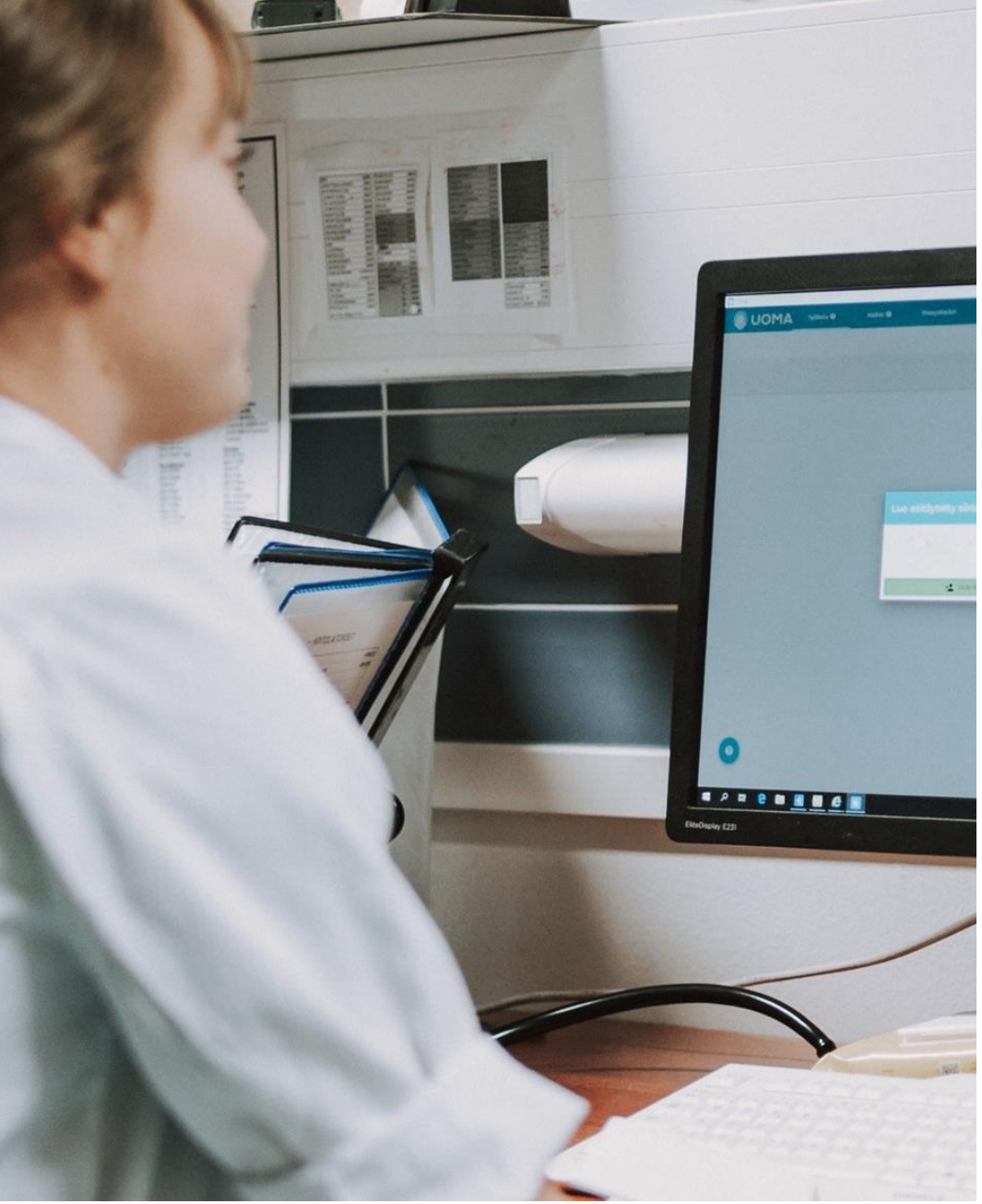
BUSINESS FINLAND

care care



BETTER PATIENT TRANSFERS

OUR SOLUTION

Unitary Healthcare's Uoma is a patient logistics system that automatically routes transfer requests to the right recipients. The occupancy status of the entire hospital district is visible to all users in real time. It acts as a secure platform for communication between and inside organizations and includes integrated checklists for safe transfers. It can be used in areas of any size, from internal transfers in a single small hospital to a large country-wide multi-node logistics system. The system is SaaS based and fast. The fully remote configuration ensures quick setup across the whole area.

UNIQUENESS AND IMPACT

Uoma makes patient transfers safer, reduces costs and makes the work environment more comfortable. It reduces interruptions and time spent on the phone, leaving more time for the patient. Department turnaround times are reduced, as follow-up care is quicker and easier. Our user feedback is excellent. Over 95% of users would no longer agree to return to the traditional patient transfer method.

COMPANY

We are Finland’s leading software company specializing in patient logistics. Uoma is used in more than 220 healthcare units in five hospital districts.

REFERENCES

Pirkanmaa Hospital District, HUS Hyvinkää Hospital Area, Satakunta Hospital District, Central Finland Hospital District and Vaasa Hospital District, Finland.

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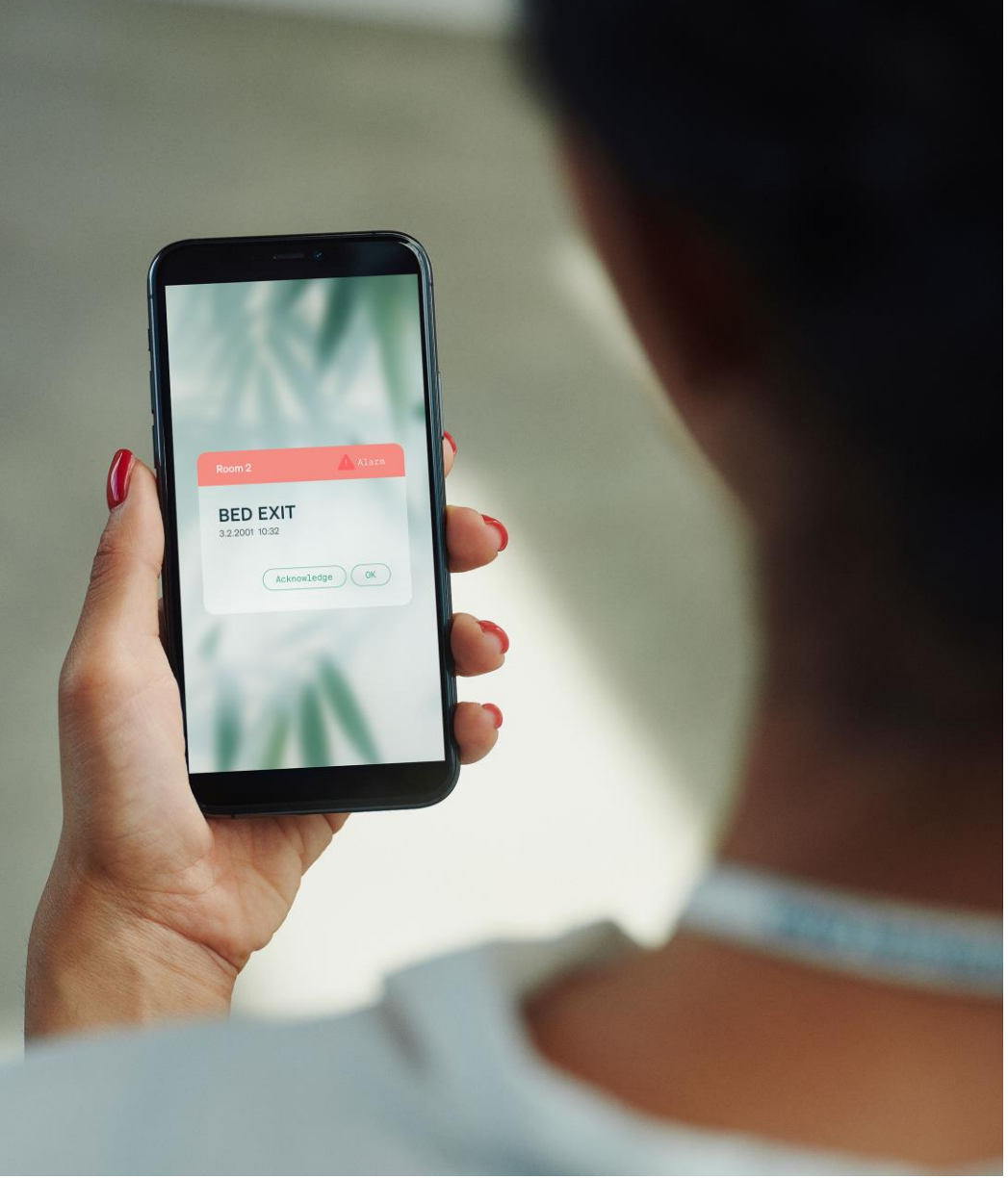
BUSINESS FINLAND

UNITARY HEALTHCARE



VERSO VISION - AI-EYES FOR SAFER CARE

OUR SOLUTION

Verso Vision is the world's leading AI based solution provider for fall prevention and detection for healthcare. It uses proven AI to prevent falls before they happen and to instantly alert healthcare staff when they do. Our technology uses AI and machine vision analysis to detect when a patient is restless, about to get up, out of bed or has fallen. The solution can be integrated with other sensors, such as sound analysis. There are also versatile deployment possibilities for different applications in various fields of industry and healthcare. It is designed ensure patient security while supporting patient privacy. It has been developed and tested for years in close cooperation with HUS Helsinki University Hospital and has been in wide hospital production use in hospitals since 2017.

UNIQUENESS AND IMPACT

Verso Vision is the most advanced, tested and proven fall-management system on the hospital and care market. It is already being used in many of the world's best hospitals and care facilities to significantly increase patient safety. The solution has been proven to help prevent up to 50% of patient falls by using AI to alert staff as soon as apatient is restless or attempting to get out of bed – all while preserving patient privacy. And if a fall does happen, the system alerts staff immediately, ensuring that the patient receives immediate care. It keeps patients safe, increases nursing staff efficiency, saves money, and can easily be scaled in the future.

COMPANY

Verso Vision delivers software and solutions based on AI and video analytics for healthcare and other services. Our cutting-edge solution identifies patient movement and immediately alerts staff to help.

REFERENCES

Case Espoo Hospital: Fall prevention for patients at risk of getting out of bed - approximately 50 per day, 15,000 – 20,000 per year. Our system prevents 50%.

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BUSINESS FINLAND

versovision

5. INFECTION PREVENTION AND CONTROL

Clean air, real-time air quality sensing systems, disinfection solutions and the latest decontamination technology to secure safe activities in hospitals.

CLEAN AIR
Air0
Genano
Halton
Inspector Sec
SmartWatcher
TKR-Marketing

DISINFECTION
KiiltoClean
Nanoksi Finland
SKC Desi
Spectral Blue

BUSINESS
FINLAND

VIRUS-FREE AIR FOR HOSPITALS AND CLINICS

OUR SOLUTION

Air0 provides the highest quality standalone air purifiers for healthcare and hospitals. All Air0 Purifiers provide the highest amount of clean air, ensuring all air is purified efficiently. HEPA-grade purification efficiently removes 99.95% of viruses, bacteria, allergens, fine particles, gases and other impurities from the air with only one pass.

The completely new AntiViral HEPA eliminates viruses as they hit the filter, as tested with the SARS-CoV-2 virus by the University of Helsinki. Air0's PURE600 AntiViral provides up to 824 m^3/h of clean air, which is approximately 2–4 times more than traditional options can provide.

UNIQUENESS AND IMPACT

Air0 provides a smart and connected air purifier to manage air purification for all rooms remotely from one place. The IoT solution connects all purifiers into one system, enabling purification scheduling and automatic alarms to ensure that air purification is always in operation as planned.

Air0 combines the best of standalone and central air purification. Standalone air purifiers can be transferred easily to where they are needed the most.The IoT solution enables air purifiers to be connected to a building's management system. It offers a fast and easy plug-in installation.

COMPANY

Air0 is a Finnish high-tech company, founded in 2013. We specialize in indoor air purification solutions for professional use. All our products are designed, developed and made in Finland.

REFERENCES

Kanta-Häme Hospital, a public municipal hospital, PlusTerveys, for private dental care, and Lielahti Pharmacy, Finland.

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BUSINESS FINLAND

Air0 BREATHE FINLAND™

SUPERIOR AIR DECONTAMINATION TECHNOLOGY

OUR SOLUTION

Genano offers patented and unique air decontamination technology for the most demanding conditions in hospital critical areas, laboratories and clean rooms. Our technology has been in use for over 20 years, with 10,000 units sold and backed up by extensive testing with excellent results. In hospitals, the focus is on reducing the rate of hospital-acquired infections (HAI) by protecting patients and staff, especially in hospital isolation rooms, operating theaters (OTs), intensive care units (ICUs) and hematology units. During COVID-19, Genano has protected people against the transmission of infectious airborne microbes in hundreds of hospitals around the world. Our technology has been proven to eliminate all microbes, including the SARS-CoV-2 virus, with 99.999% effectivity.

UNIQUENESS AND IMPACT

Genano air decontamination technology removes even nano-sized particles and eliminates viruses and bacteria. It also removes gases and odors.

Additionally, it provides a constant clean air delivery rate 24/7 and a solution based on green values.

It has no disposable filters and provides low energy consumption. It features long-lasting quality, as it is made of stainless steel. No construction work is needed at the premises. The solution offers plug-and-play installation and, where needed, has easily removable units.

COMPANY

Our technology has been developed with respected universities and research institutes in Finland. Genano is based in Espoo with partners in over 30 countries and installations in more than 50 countries.

REFERENCES

Hundreds of hospitals, mainly in Europe, the Gulf region and in Southeast Asia. A hospital list is available.

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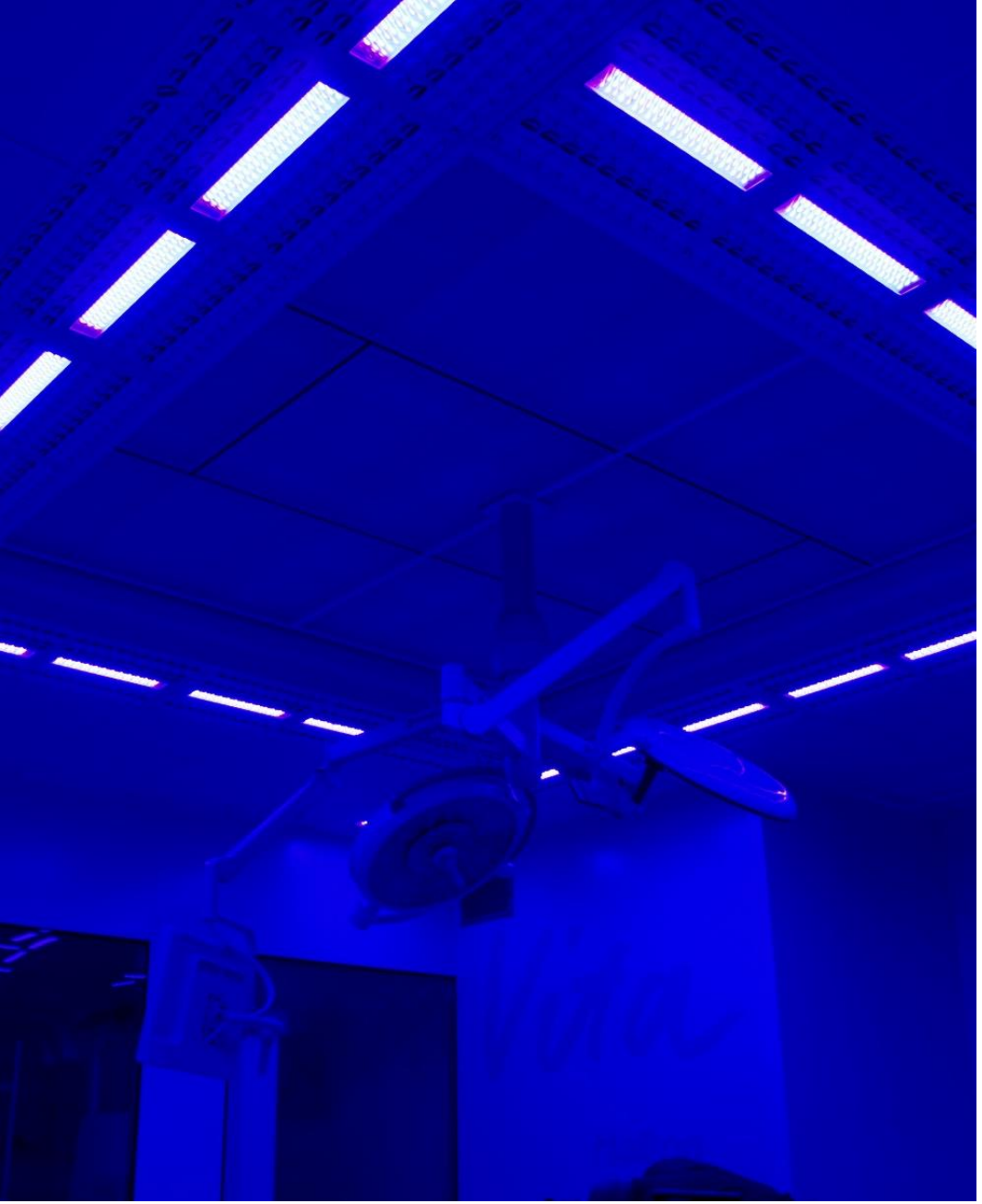
BUSINESS FINLAND

Genano
Safe Air. Nothing Else.



INNOVATIVE SOLUTIONS INCREASE SAFETY

OUR SOLUTION

Halton Vita OR Space offers ultra-clean ventilation for the entire operating space – it brings cleanliness in the OR, flexibility of using the space, and comfort for the staff. The new system has been enriched with blue light benefits that disinfect the space during non-working hours.

UNIQUENESS AND IMPACT

Halton Vita OR Space enables flexible use and design of operating technologies. Thanks to the solution the entire space is available for use for the staff and instrument tables. Halton Vita OR Space allows surgeons and OR staff to move freely within the OR without increasing infection risks. Operational efficiency allows quick changes in the operating room setup, type of operation, or medical team of personnel. This significantly prolongs the operating room life cycle as well as contributes to enhancing patient safety and the progress of future-proof medical equipment.

Disinfection blue light, additionally embedded in the diffusers, does not interfere with the airflow pattern. Thus work of ventilation and level of cleanliness is ensured as in a standard solution and the LED devices emit white light during operations and while people are in the room. When the room is empty, the disinfection blue light is on and disinfects the space, reducing the number of microbes significantly.

COMPANY

Halton Group is a family-owned, global technology leader in indoor air solutions for demanding spaces. At Halton, our mission is to enable people's wellbeing in these environments.

REFERENCES

Halton's reference cases are available here: https://www.halton.com/resources/references/#/feed&buildingTypes=207 .

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BUSINESS FINLAND

Halton

PREMIUM FINNISH AIR PURIFIER

OUR SOLUTION

Inspector Sec (ISEC) air purifiers are developed and manufactured in Finland. The design of the devices is clean and simple Scandinavian style. Fans, filters and materials used are of very high quality and long lasting. The outer shell of the air purifiers is handcrafted from Finnish wood and painted steel. The cleaning technology is passive with three filters – a pre-filter, an activated carbon filter and a H13 HEPA filter. The purifier does not produce harmful impurities or ozone. Our air purifiers are able to absorb 100% of volatile organic compounds (VOCs), smells and other impurities.

It cleans 99.97% of particles like SARS-CoV-2.

UNIQUENESS AND IMPACT

ISEC air purifiers produce clean indoor air for all rooms of the hospital. Our movable air purifiers enable safe work, even during a coronavirus pandemic.

COMPANY

ISEC provides research and expert services as well as equipment solutions for indoor air and infection risk management.

REFERENCES

Four of Finland's five largest hospitals use ISEC air purifiers – Helsinki, Tampere, Oulu and Kuopio University Central Hospitals.

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BUSINESS FINLAND

ISEC

BUILDING HEALTH THROUGH BETTER INDOOR AIR QUALITY

OUR SOLUTION

Smartwatcher offers advanced indoor air quality measurement services enabling owners and operators of public or commercial real estates to take actions before health and building damages emerge.

- Easy-to-use, real-time, gapless indoor air quality monitoring devices and services for professionals.
- Precision indoor air quality data and analytics on your mobile and in the cloud.
- Measure multiple parameters all-in-one device.

UNIQUENESS AND IMPACT

With Smartwatcher you know your indoor air quality. You can monitor indoor air quality instantly and over time without a gap.

- Make the right decisions at the right time.
- Act preventively or immediately.
- Protect people's health and property values.

COMPANY

Established in 2016 Smartwatcher is a pioneer in the world of indoor air quality monitoring and known for its customer commitment.

Satisfied facility owners, municipalities, hospitals, health centres, schools, kindergartens, office buildings use Smartwatcher to make sure indoor air quality is always safe.

REFERENCES

Different locations and wards at Helsinki University Hospital since 2017.

Tampere University Hospital
Coxa Hospital for Joint Replacement
South Karelian Central Hospital
Several regional hospitals and health care centers, both private and public.

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BUSINESS FINLAND

smartwatcher

HARMFUL SUBSTANCE AND AIR LEAKAGE COTROL

OUR SOLUTION

TKR manufactures coatings that can be used to prevent harmful substances from entering indoor air via diffusion or air leaks within structures. The deterioration of materials used in construction and tight renovation schedules in the healthcare sector pose a problem to sustainable healthcare infrastructure.

Our most used solution is sealing floor-wall seams inside buildings to prevent air leaks from bringing dust, spores or fibers into indoor air. Another commonly used solution is coating surfaces and encapsulating structures that contain asbestos, polycyclic aromatic hydrocarbon (PAH), volatile organic (VO) substances or other dangerous materials, such as carpet glue or tar coating, that pose a danger if they come in contact with air.

UNIQUENESS AND IMPACT

TKR coatings are made from renewable natural resources. They are very low emission and odorless, so they can be used in areas that cannot be fully shut down for renovation. Low emissions also make the coating safe for the installer to use.

Installation is easy due to the lack of other materials needed, such as primers or stiffening and support bands. The coatings have a long service life with high elasticity, high adhesion and resistance to wear and chemicals. The same material can be used for waterproofing and as the final surface.

COMPANY

TKR-Marketing Oy is located in Joensuu, Finland. We have a production facility in Pernajan Vanhakylä that manufactures and ships our products. We have carried out product and application research since the 80s.

REFERENCES

North Karelian Central Hospital, Jorvi Hospital, Peijas Hospital, Porvoo Hospital, Tampere University Hospital and Kanta-Häme Central Hospital, Finland.

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BUSINESS FINLAND

TKR Plastic by nature

DATA-DRIVEN APPROACH TO IMPROVE HAND HYGIENE

OUR SOLUTION

Kiilto Pro Hygimon is a new kind of digital tool for infection prevention. Kiilto Pro Hygimon is an automated hand hygiene monitoring solution that allows you to anonymously monitor and collect more accurate data regarding hand hygiene compliance than before. The data is gathered by different workgroups and is based on disinfectant usage. The solution helps optimize the location of the disinfectant dispensers and helps make data-driven decisions on hygiene-improving actions and measure their effect. Hygimon's fast and reliable reports help infection control teams improve quality and patient safety. They also reduce healthcare-associated infections and their costs.

UNIQUENESS AND IMPACT

Kiilto Pro Hygimon is an innovative IoT solution aimed at improving hand hygiene in healthcare. The solution automatically records every single use of disinfectant, providing analysis against set targets and recommendations. Customizable trend graphs in the cloud-based reporting tool provide valuable insight into hand hygiene compliance.

Kiilto Pro Hygimon improves hand hygiene and reduces treatment-related infections and their costs, supporting an infection control team. The solution is easily integrated into existing hospital infrastructure.

COMPANY

Kiilto develops, produces and sells chemical industry solutions. Our operations are guided by a strong commitment to the future and the drive to be an environmental leader in our industry.

REFERENCES

Kiilto Pro Hygimon is currently being piloted in Turku University Hospital's cancer ward, which has 24 patient beds and very high hygiene requirements.

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BUSINESS
FINLAND

KiiLTO

BUSINESS
FINLAND

NEW-GENERATION SELF-DISINFECTING COATING

OUR SOLUTION

Nanoksi Finland's FOTONIT® is a patented innovation – a new-generation photocatalytic, self-disinfecting coating solution that destroys pathogens, such as bacteria, viruses, yeasts and mold spores. The coating prevents the transmission of infectious diseases from coated surfaces. Based on a photocatalytic reaction, the coating works constantly as a disinfectant by destroying microbes that land on the surface. FOTONIT® is an important part of health security and overall surface hygiene. Unlike to traditional disinfectants, bacteria and viruses are not capable of becoming resistant to photocatalysis.

UNIQUENESS AND IMPACT

The base of the FOTONIT® solution is titanium dioxide – a safe, non-toxic substance widely used in paints and cosmetics. Little particles, or harvesters, are added to the titanium dioxide. Once the solution has been applied, they react to light and form an invisible protective coating on the surface. The coating can be applied on all surface materials. It protects even in between cleanings.

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The coating creates a healthy, clean environment and reduces cleaning expenses. Product development know-how is part of a more sustainable future.

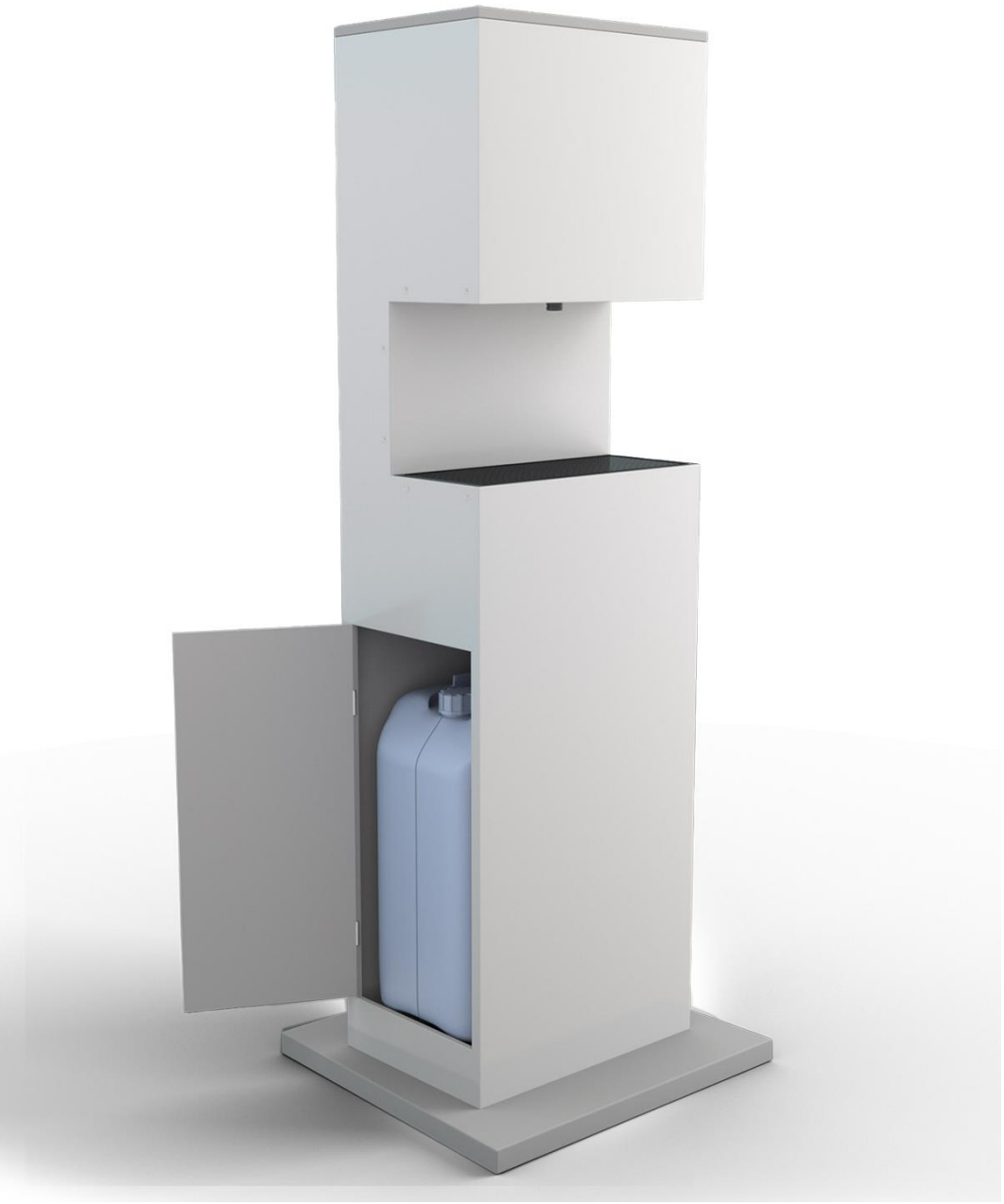
COMPANY

Nanotechnology company Nanoksi Finland was founded in 2017. It develops and offers both dirt-resistant and self-disinfecting coating service solutions for private and public sectors across Europe.

REFERENCES

Nanoksi has coated spaces and surfaces for Docrates Cancer center and the Ronald McDonald House in Finland as well as the Fontainebleau hospital in France.

Nanoksi™



OMEGA 2000 – 27,000 DOSES WITH ONE REFILL

OUR SOLUTION

SKC Desi's Omega 2000 touch-free hand disinfectant dispenser is ideal for hospitals and health centers. It detects hands automatically and doses a suitable amount of hand disinfectant. The device has a 20-liter tank, which corresponds to approximately 27,000 doses. The refillable tank is stored in a separate lockable space.

The device can use either standard liquid hand sanitizer or alcohol-free hand sanitizer foam. Non-alcoholic foam is especially suitable for places where children use the machine or anywhere where alcoholic products are not suitable.

Omega 2000 is made of powder-coated steel and weighs 31 kg. It operates on standard power.

UNIQUENESS AND IMPACT

Omega 2000 is almost completely made of recyclable materials. It saves staff time by not needing to fill the tank often.

To maximize utilization, the device should be placed in a central location along people's routes.

It is possible to order a separate information display for the device.

COMPANY

SKC Desi Oy Ltd is a Finnish family company. We produce, import and sell products for cleaning and hygiene. We are looking for new international partners and resellers.

REFERENCES

There are hundreds of Omega 2000 devices in use. One of the users is HUS, the largest healthcare provider and the second-largest employer in Finland.

BUSINESS FINLAND

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SKC DESI

CONTINUOUS DISINFECTION WITH BLUE LIGHT

OUR SOLUTION

Spectral Blue is an automatic and continuous disinfection system based on visible blue light. Visible blue light is a natural disinfectant that inactivates microbes in the air and on surfaces without requiring any human input. Hospitals use it to ensure a high hygienic level in operating rooms, at reception desks, in restrooms, laboratories and sterile storage, for instance. Because Spectral Blue is completely safe for people and materials, it can be used around the clock, even in areas where people are present, unlike traditional methods. Spectral Blue can eliminate all bacteria – including antibiotic-resistant strains – yeasts, molds and viruses such as SARS-CoV-2.

UNIQUENESS AND IMPACT

The Spectral Blue system is 100% safe and sustainable. It is UV- and chemical-free, making it completely safe for staff, patients and the environment. Using blue light disinfection makes it possible for hospitals to reduce the use of toxic chemical disinfectants, which has direct positive impact on the health of nurses and cleaning staff.

Reducing the use of chemicals also has a direct environmental impact, for fewer chemicals end up in wastewater. Spectral Blue uses long-lifetime and energy-efficient LED technology and generates no waste.

COMPANY

LED Tailor is the world's leading provider of automatic disinfection technology based on visible blue light and photocatalytic coating. Its solutions are being used in hospitals and ambulances.

REFERENCES

Espoo Hospital's operating rooms and social spaces, Turku University Hospital's social spaces, Jyväskylä Hospital Nova's hybrid operating room and Mikkeli Central Hospital's central sterile storage, Finland. Donghoon Hospital's operating room, South Korea. Halton in page 67 uses our Spectral Blue –technology in their solution.

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BUSINESS FINLAND

spectral.blue

6. LABORATORY, IMAGING AND DIAGNOSTICS

World-leading imaging technologies, research, development and production of in-vitro and in-vivo diagnostics as well as hospital laboratory monitoring systems.

Aiforia	Optomed
Cerenion	Planmeca
Finbiosoft	Planmed
Grundium	Resistomap
NE Device SW	Vaisala

Look into companies in Diagnostics offering.

BUSINESS
FINLAND

AI-ASSISTED DIAGNOSTICS

OUR SOLUTION

For pathology labs looking to increase productivity and improve diagnostic accuracy, the Aiforia Clinical Suites offer AI-supported diagnostics, intelligent visualization, automated screening and reporting tools in one cloud-based platform. With the Aiforia Clinical Suite pathologists can harness both the full benefits of a digitized workflow and the full potential of their own expertise by automating repetitive tasks, increasing the speed and accuracy of case review thereby enabling labs to diagnose more patients in less time.

UNIQUENESS AND IMPACT

The Aiforia Clinical Suite is one platform with a multitude of clinical possibilities. We are currently developing Clinical Suites for the most prevalent cancers in the world (prostate, breast, lung, colorectal, ovarian and skin) as well as chronic conditions like IBD. That is not all. The Aiforia Clinical Suite can cater to any disease. Thanks to our adaptable AI model development platform you can deploy the Aiforia Clinical Suite for any clinical requirement.

COMPANY

Aiforia is composed of a mix of expert pathologists, software developers who collectively hold over 100 years' AI experience, and a business team with backgrounds in the pharma and biotech industries.

REFERENCES

Collaborating with Pathan, one of the largest pathology laboratories in the Netherlands, to use Aiforia's AI software for clinical diagnostics.

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aiforia®
AI for image analysis

BUSINESS FINLAND

INTRODUCING THE PULSE OF THE BRAIN™

OUR SOLUTION

Cerenion® C-Trend® patented technology reveals the status of the brain as one simple index at the bedside without requiring any changes to patient care. The solution combines standard electroencephalography (EEG) measurement with clinically proven artificial intelligence to allow medical professionals to see how their patient's brain is doing.

UNIQUENESS AND IMPACT

Our technology has the potential to improve the quality and reduce the cost of intensive care. The index works with both short-term EEG and continuous EEG, offering experts a powerful overview of long-term measurements. Our product is manufactured under ISO 13485 quality management and in conformance with IEC 62304. C-Trend® is CE marked as a Class IIb medical device in the European Union (CE 0598).

COMPANY

Cerenion® is a science-based spinoff from the University of Oulu, Finland, that develops technology for the measurement of brain function during intensive care. We are ISO 13485:2016 certified.

REFERENCES

C-Trend® is in use or involved in studies conducted at Oulu University Hospital, Turku University Hospital and Meilahti Hospital in Helsinki, among others.

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BUSINESS FINLAND

Cerenion®

INCREASING LABORATORY QUALITY AND EFFICIENCY

OUR SOLUTION

Finbiosoft provides the world's first suite of software services empowering our customers around the world to efficiently and accurately evaluate and improve the quality of their diagnostics. At the same time, automation can reduce most of the time previously spent measuring quality. Our products Validation Manager and EQA Manager are cloud-based software services that automate internal and external quality assurance of laboratory methods and instruments. Use cases start from large verification projects of new instruments, methods or labs. We also offer more day-to-day quality work, including the comparison of reagent lots, estimation of measurement uncertainty and running external quality assessment (EQA) rounds.

UNIQUENESS AND IMPACT

With Finbiosoft software services, hospital laboratories can save valuable time and resources by automating burdensome and time-consuming quality work. Our customers have measured that as much as 95% of time previously spent on quality work can be saved with Finbiosoft solutions.

What is most important, however, is the leap in quality that can be reached. Our solutions help laboratories reach ISO 15189, ISO 17025 and In Vitro Diagnostic Regulation (IVDR) compliance. In addition, no more paper reporting is needed. Instead, laboratory quality can be monitored on a digital dashboard.

COMPANY

Finbiosoft is an innovative software company founded in 2011 with the mission to help laboratories reach higher quality and better efficiency. We currently serve laboratories in 12 countries.

REFERENCES

SYNLAB, Finland. Oslo University Hospital, Norway. NHS South West London Pathology and NHS Bedfordshire, the UK. AescuLabor Hamburg and University Hospital Regensburg, Germany.

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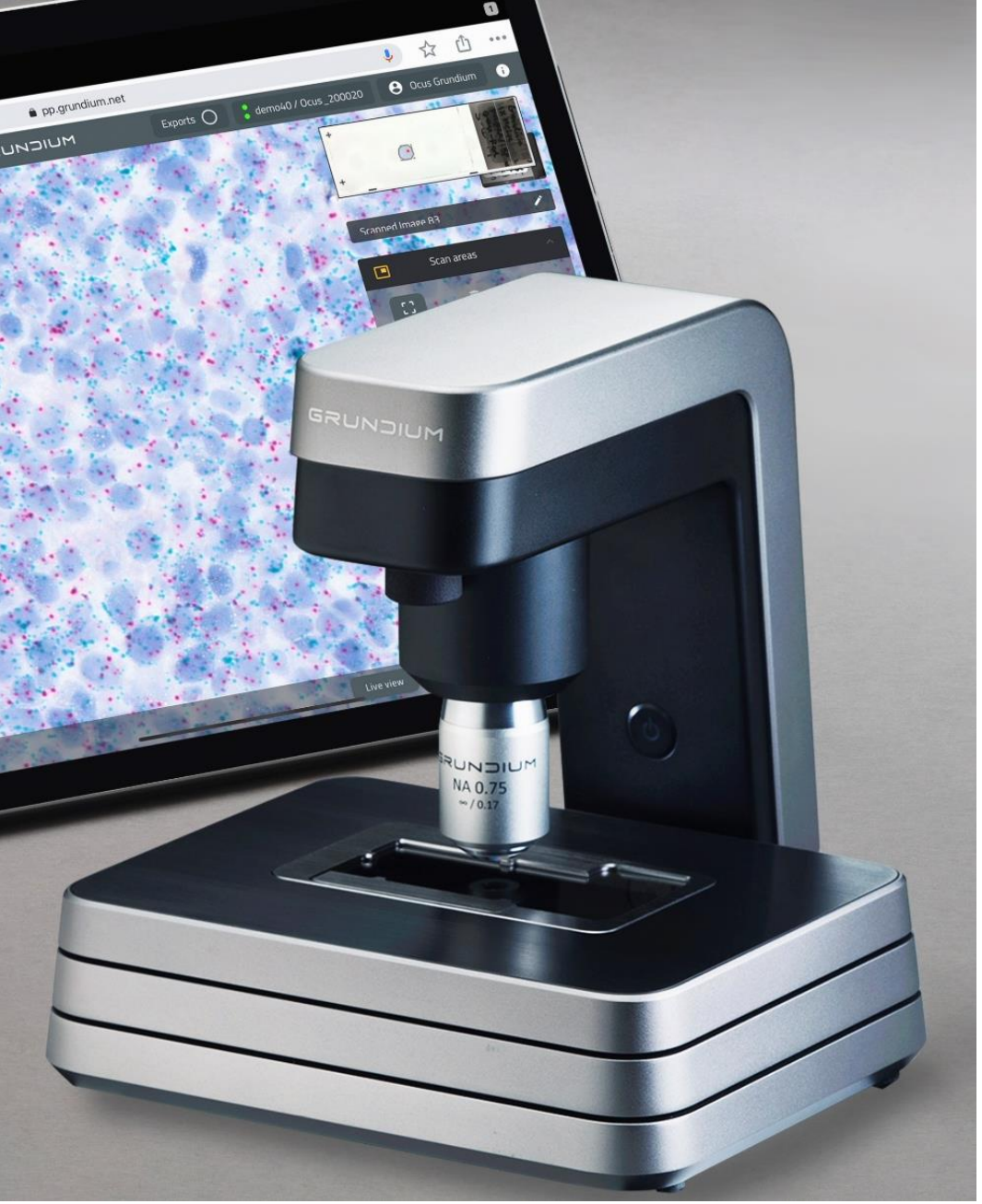
BUSINESS FINLAND

Finbiosoft®



WORLD'S MOST PRACTICAL DIGITAL SLIDE SCANNER

OUR SOLUTION

The Grundium Ocus® is a digital microscope scanner enabling fast and easy examination and diagnosis of pathology tissue and fluid samples anywhere. Designed on mobile technology, it is compact, robust, affordable and very easy to use. The Ocus's imaging method is patented – it produces the sharpest digital images in the business. At the size of roughly a volleyball, the Ocus is so small and portable, it fits in any lab and can be carried anywhere in the lab or the field. The Ocus microscope scanner is the perfect imaging component for the centralized diagnosis of pathology service providers. In the hospital lab, it is available immediately. It is also highly suitable for education and field work.

UNIQUENESS AND IMPACT

The Grundium Ocus does away with having to ship sample slides to pathologists or having the pathologist travel to the hospital, enabling experts to concentrate on what they do best – diagnosing.

Ocus is designed to fit any hospital IT system and comes without proprietary software, monthly fees or added costs. It removes the entry barrier to digital pathology and makes the best professional diagnosis available for better patient life.

COMPANY

Grundium was founded in 2015 in Tampere by ex-Nokia engineers. Ocus® microscope scanners are based on over 20 years of experience in optics, sensors and beautiful high-precision devices.

REFERENCES

Massachusetts General Hospital, Michigan University Hospital and University of Pittsburgh Medical Center, the US. Karolinska Institute, Sweden. Fimlab and SYNLAB, Finland. Zoetis Animal Health and NHS, the UK.

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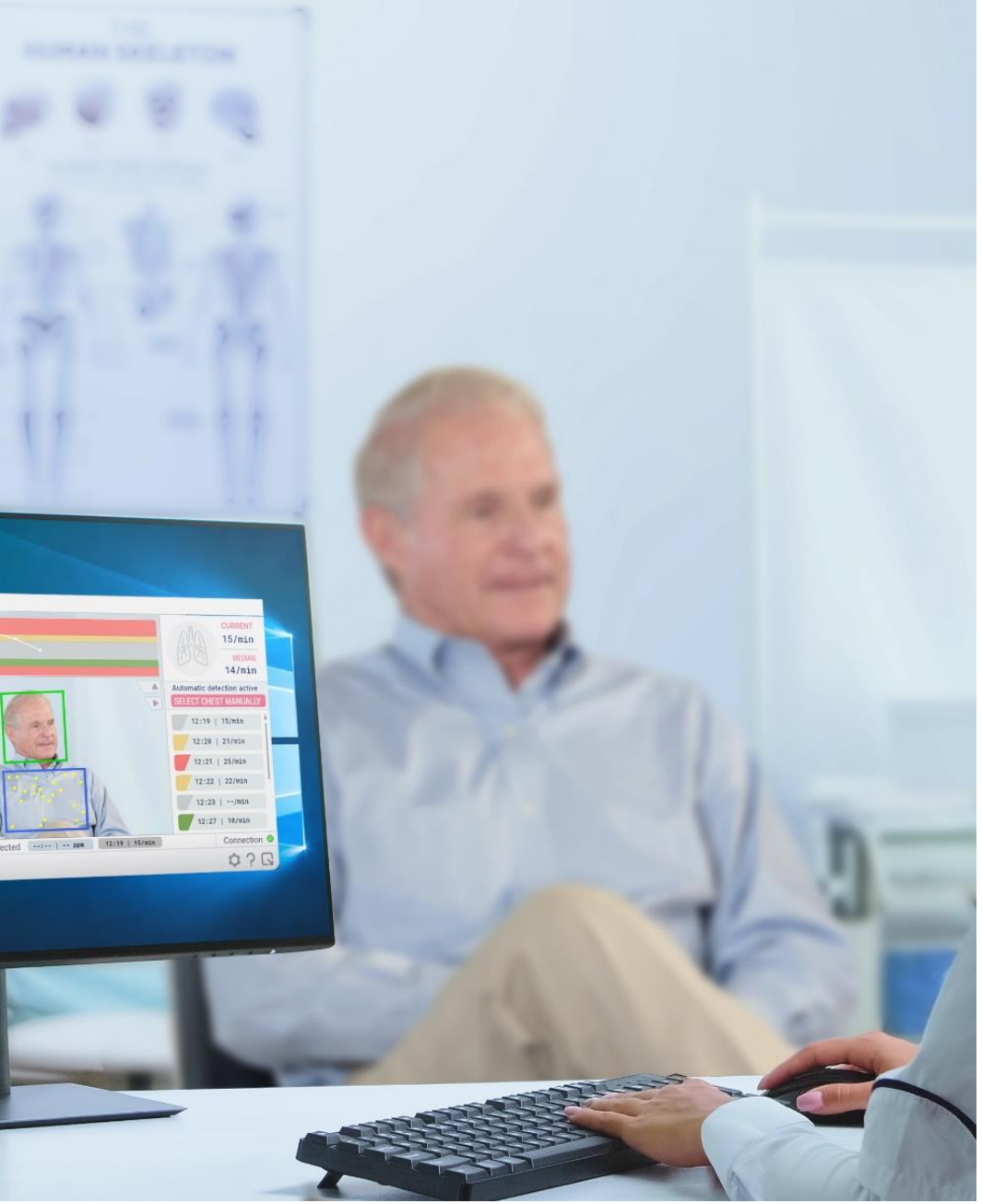
BUSINESS FINLAND

GRUNDIUM



VITAL SIGN MEASUREMENTS FROM A CAMERA

OUR SOLUTION

Vitacam is a CE-marked, software-based medical device that utilizes regular cameras, such as webcams and smartphone cameras, to measure a patient's pulse and respiratory rate. By tracking chest movements and minute color changes in the face caused by circulation, the system provides a contactless method of gathering observations. Measurements can be extracted from either a continuous live stream or a video clip, while the custom mobile application also enables the logging of other vital sign data for a comprehensive overview. The technology is suitable for detecting early signs of deterioration in care homes and at-home use, with untapped potential for online video consultations.

UNIQUENESS AND IMPACT

As a digital solution requiring only basic computer or mobile device literacy, Vitacam is an accessible, low-cost measuring solution suitable for routine monitoring and spot checks alike. The contactless system is non-invasive, customizable and easy to maintain, as no specialized equipment is required.

As one of the few solutions capable of measuring respiratory rate outside critical care, the system can also provide valuable new data free from human bias. Vitacam can be used as a standalone system or integrated into existing eHealth solutions.

COMPANY

Vitacam is a solution developed by medical device manufacturer NE Device SW Ltd. Founded in 2014 in Oulu, Finland, the company combines deep expertise in imaging and software to measure health.

REFERENCES

Vitacam has been co-created with Oulu University Hospital and installed in their emergency department since 2020, as well as other sites in Finland and the UK.

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BUSINESS FINLAND

Vitacam® BY NE DEVICE SW

EFFICIENT SOLUTIONS FOR PREVENTING BLINDNESS

OUR SOLUTION

Optomed Aurora IQ handheld fundus camera uses artificial intelligence (AI) to automatically screen in seconds for blinding eye diseases, such as diabetic retinopathy. Therefore, it helps smaller clinics and primary care clinics make their eye screening programs more accessible to patients. Optomed Aurora IQ includes an optional AI service for analysis of diabetic retinopathy changes, for example. AI algorithms support ophthalmologists and eye specialists in eye screening, image grading, diagnosing and treatment planning. Today, many of Optomed's customers are performing eye screenings with AI throughout Europe, the Americas, Asia Pacific and Africa.

UNIQUENESS AND IMPACT

Effective eye screening prevents diabetes-related blindness and reduces overall healthcare costs. With Optomed's handheld cameras, fundus imaging can be performed in departments and units where eye screening is needed, such as emergency rooms and endocrinology, pediatric and eye clinics. It is also possible to replace the first-line grader with AI, freeing healthcare professional resources to focus on patients with diagnosed diseases.

COMPANY

Founded in 2004, Optomed is a Finnish medical technology company and one of the leading providers of handheld fundus cameras and screening software.

REFERENCES

We cooperate with several hospitals globally, such as St James' Hospital in Dublin and Queens University Hospital in Belfast, Ireland.

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BUSINESS FINLAND

OPTOMED

COMPLETE SOLUTION FOR MAXILLOFACIAL IMAGING

OUR SOLUTION

Planmeca offers comprehensive solutions for oral and maxillofacial treatments in all clinical environments. Our innovative Planmeca Viso® cone beam computed tomography (CBCT) unit provides a wide selection of volumes to cover all head and neck imaging needs. The diagnostic value of radiographs is improved by Planmeca Romexis® software and its complete set of tools for image viewing and diagnosis. It also offers various treatment planning functionalities. For example, surgeons can plan orthognathic surgeries virtually with the Romexis® CMF Surgery module. The offering for hospitals is complemented by Planmeca ProModel™ service, offering virtual surgical planning and patient-specific implants for the most demanding surgical procedures.

UNIQUENESS AND IMPACT

Our products are designed to improve the daily workflow of dental and medical professionals. We pay special attention to patient safety in our product development and have been able to reduce patient doses without statistical reduction in image quality. All Planmeca solutions have been designed and developed with the future in mind.

Our durable and platform-based X-ray units with timeless design are easy to upgrade with software updates and new features instead of replacing them, which saves significant resources.

COMPANY

Planmeca Oy develops and manufactures digital dental units, world-class 3D and 2D imaging devices and comprehensive CAD/CAM and software solutions that are distributed in over 120 countries worldwide.

REFERENCES

Planmeca's solutions can be found in clinics and hospitals all around the world, including Karolinska University Hospital, Sweden.

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BUSINESS FINLAND

PLANMECA

MEDICAL IMAGING EXCELLENCE

OUR SOLUTION

Planmed is proud to be one of the world's leading companies in the fight against breast cancer through sophisticated technology. We offer a comprehensive product portfolio in the field of mammography. Outstanding image quality and high performance make the Planmed Clarity™ product family one of the most advanced mammography systems in the market. We are also an industry-leading forerunner in 3D orthopedic as well as head and neck imaging with our advanced and unique CT system, Planmed Verity®. It is a point-of-care scanner providing high-quality 3D images with a low radiation dose.

UNIQUENESS AND IMPACT

Planmed advanced imaging equipment and accessories provide a unique combination of image quality and ease of use for medical imaging professionals. Our mammography product line contains many unique features that add to this goal. Our orthopedic imaging equipment provides the unique ability to see lower extremities under a natural load.

A 3D weight-bearing image of a knee, ankle, foot and toes under natural load can reveal problems otherwise not discernible. The versatile patient positioning options, combined with advanced imaging algorithms, allow effortless imaging.

COMPANY

Planmed Oy, established in 1987, offers advanced medical imaging solutions for mammography and computed tomography. Today, our products can be found in more than 80 countries worldwide.

REFERENCES

A large number of references both in the public and private sector can be provided upon request.

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BUSINESS
FINLAND

Planmed

ANTIBIOTIC RESISTANCE MONITORING SERVICE

OUR SOLUTION

Resistomap helps hospitals conduct continuous resistance monitoring, take preventative measures and limit the spread of resistant bacteria. We provide a customizable laboratory and analysis service to monitor antibiotic resistance from any type of sample using the combination of molecular genetics and data science.

UNIQUENESS AND IMPACT

We transport the samples from hospitals to our laboratory in Helsinki. The samples are analyzed, and the results are interpreted and delivered within 7 days through an interactive dashboard to help users identify potential areas for intervention. Monitoring is essential as an early warning system to prevent antibiotic resistance outbreaks. We can ensure the effectiveness of antibiotics and so better protect public health. Preventing outbreaks also ensures that hospital activities remain uninterrupted and that society has access to medical care and treatments.

COMPANY

Founded in 2018 by a microbiologist and a data scientist, Resistomap is a laboratory service provider for antibiotic resistance monitoring based in Helsinki, Finland.

REFERENCES

Helsinki University Hospital (HUS), Finland. Rumah Sakit Universitas Indonesia (RSUI) and Rumah Sakit Saiful Anwar (RSSA), Indonesia.

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BUSINESS FINLAND

resistomap

VIEWLINC CONTINUOUS MONITORING SYSTEM

OUR SOLUTION

Vaisala's solutions monitor and measure GxP-regulated and non-regulated laboratory rooms or spaces – and even inside equipment. Typical users are pharmaceutical and biotechnology laboratories, research facilities, hospitals, pharmaceutical manufacturers, related storage and distributors. With nearly unlimited parameters, our solutions provide reliable measurements for almost any laboratory applications and are ideal for Good Manufacturing Practice (GMP), Good Laboratory Practice (GLP) and Good Clinical Practice (GCP) guidelines.

UNIQUENESS AND IMPACT

Vaisala's viewLinc Continuous Monitoring System provides software for real-time monitoring of and remote alarms on required parameters. The alarms can be sent, for example, via email, SMS, alarm towers or voice calls. The automated alarm reports are saved to viewLinc's secure server.

System supports a variety of wired and wireless data loggers to provide optimal solution for each measurement location's requirements. The system is scalable from one to thousands of sensing devices. viewLinc's OPC UA and API provide options for integration to other systems.

COMPANY

Vaisala is a global measurement technology leader. Our products impact what truly matters, helping to solve the global challenges of our time. Vaisala is listed on the Nasdaq Helsinki Stock Exchange.

REFERENCES

Hazel Hawkins Memorial Hospital, California, and Lonza Ltd, Texas, the US.

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BUSINESS FINLAND

VAISALA

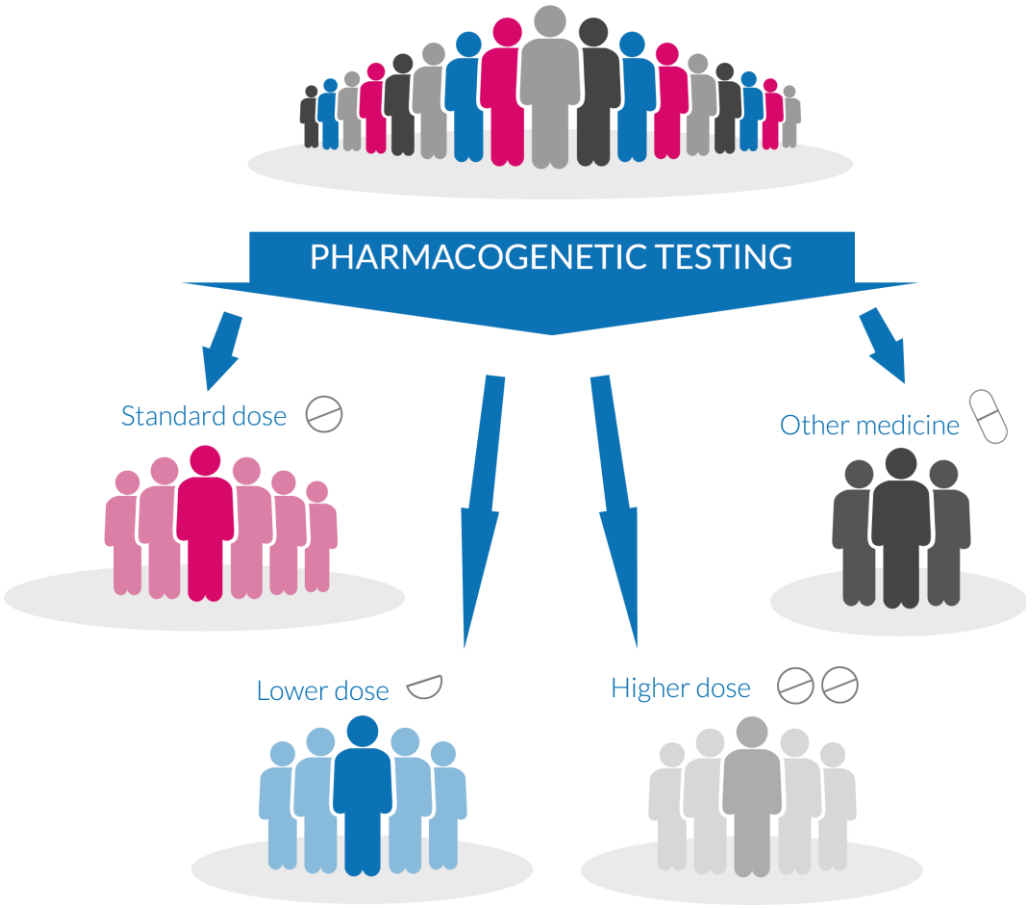
7. SECURE DATA AND ANALYTICS

From user-designed health IT systems to health data platforms and analytics on health registries and outcomes. From genome sequencing to decision support systems and solutions to access point-of-care patient data.

Abomics
Adusso
BCB Medical
ESIOR
Euformatics
Lääketietokeskus
Medanets
Medbase
Secapp
Raisoft
TietoEvry
Veil.ai

BUSINESS
FINLAND

PHARMACOGENETICS FOR DAILY CLINICAL USE



OUR SOLUTION

Abomics PGx is a pharmacogenetic interpretation service for healthcare providers and clinical laboratories that enables personalised precision medication.

Abomics GeneRx is a pharmacogenetic clinical decision support database for integration with EHR, DSS or Rx systems.

At Abomics, we make pharmacogenetics an easy tool for doctors to use in their daily clinical work. Based on a blood test, we provide doctors with a patient-specific report that shows whether a particular medicine is suitable for the patient or not and how the dosage should be adjusted.

UNIQUENESS AND IMPACT

Scientific evidence shows that pharmacogenetics gives better clinical outcomes for the patient and better cost efficiency for the hospital. Particularly in the treatment of depression, polypharmacy, coronary heart disease and stroke.

COMPANY

Abomics was founded in 2013 to translate research into personalised medication recommendations. Precision medicine is available and affordable for your patients today.

REFERENCES

The cost of genetic testing has dropped from thousands to hundreds of euros and is now available from SYNLAB, Vita Laboratoriot Oy (LADR GmbH) and others.

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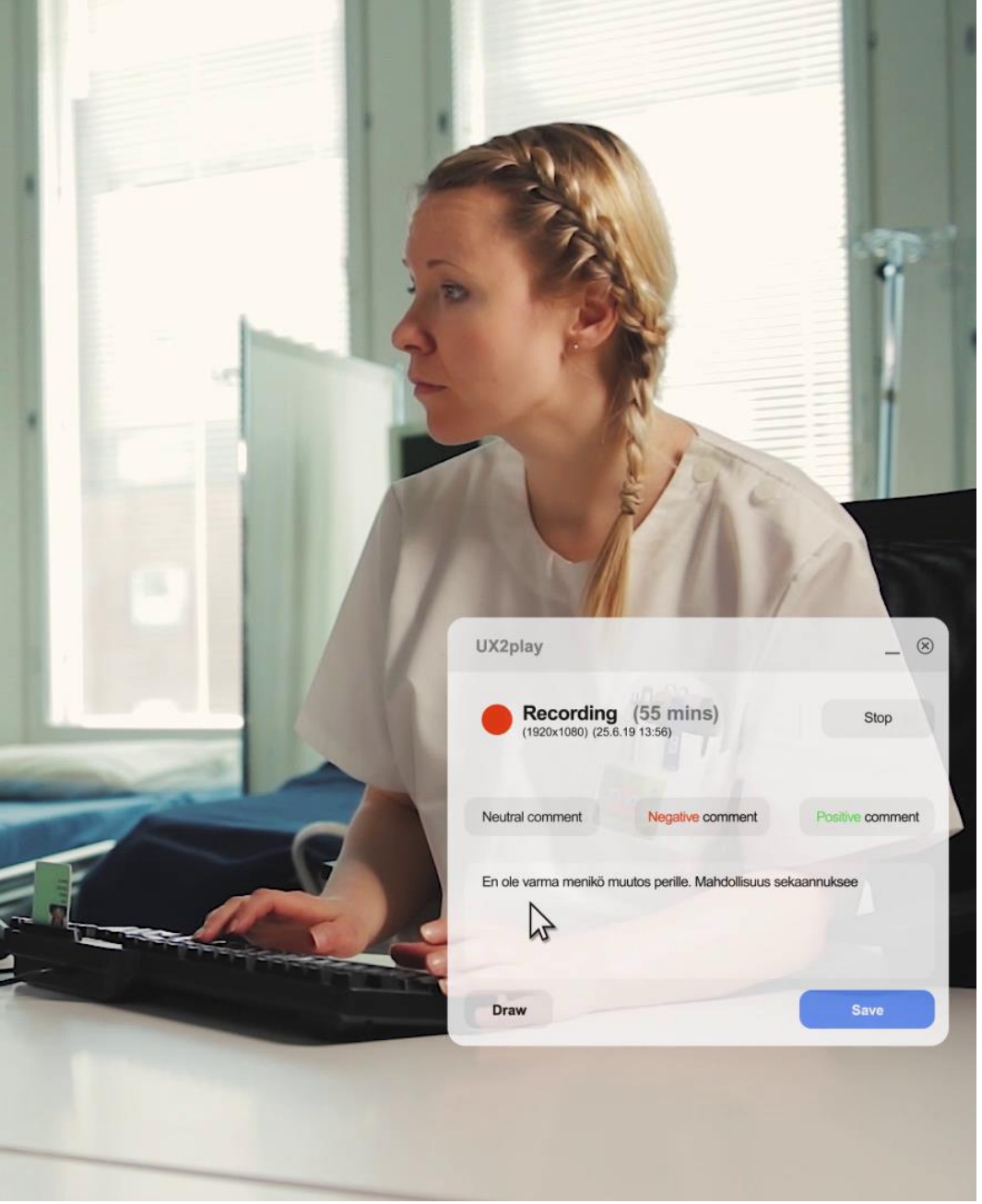
BUSINESS FINLAND

ABOMICS
Supporting medication decisions



BETTER ELECTRONIC HEALTH RECORD USABILITY AND PATIENT SAFETY

OUR SOLUTION

Adusso provides a solution that improves operations and systems used in healthcare facilities by enhancing their usability for electronic health records (EHRs). Our solution UX2play monitors the use of these systems and then provides useful data to identify and fix issues within them, making work at hospitals and medical clinics more efficient.

UNIQUENESS AND IMPACT

The benefits and impact of UX2play are its evidence-based usability analysis built on video reporting.

The plug-and-play solution communicates user feedback with ease. It resolves the most critical flaws first and gives facilities a quick return on investment through improved efficiency.

COMPANY

Adusso provides better usability for health informatics and a simpler user experience for digital services.

REFERENCES

HUS and several Finnish hospital districts with Apotti, Epic UNA, Tieto and 2M-IT EHR systems, Finland. Region Zealand with Sundhedsplatformen and Epic EHR systems, Denmark.

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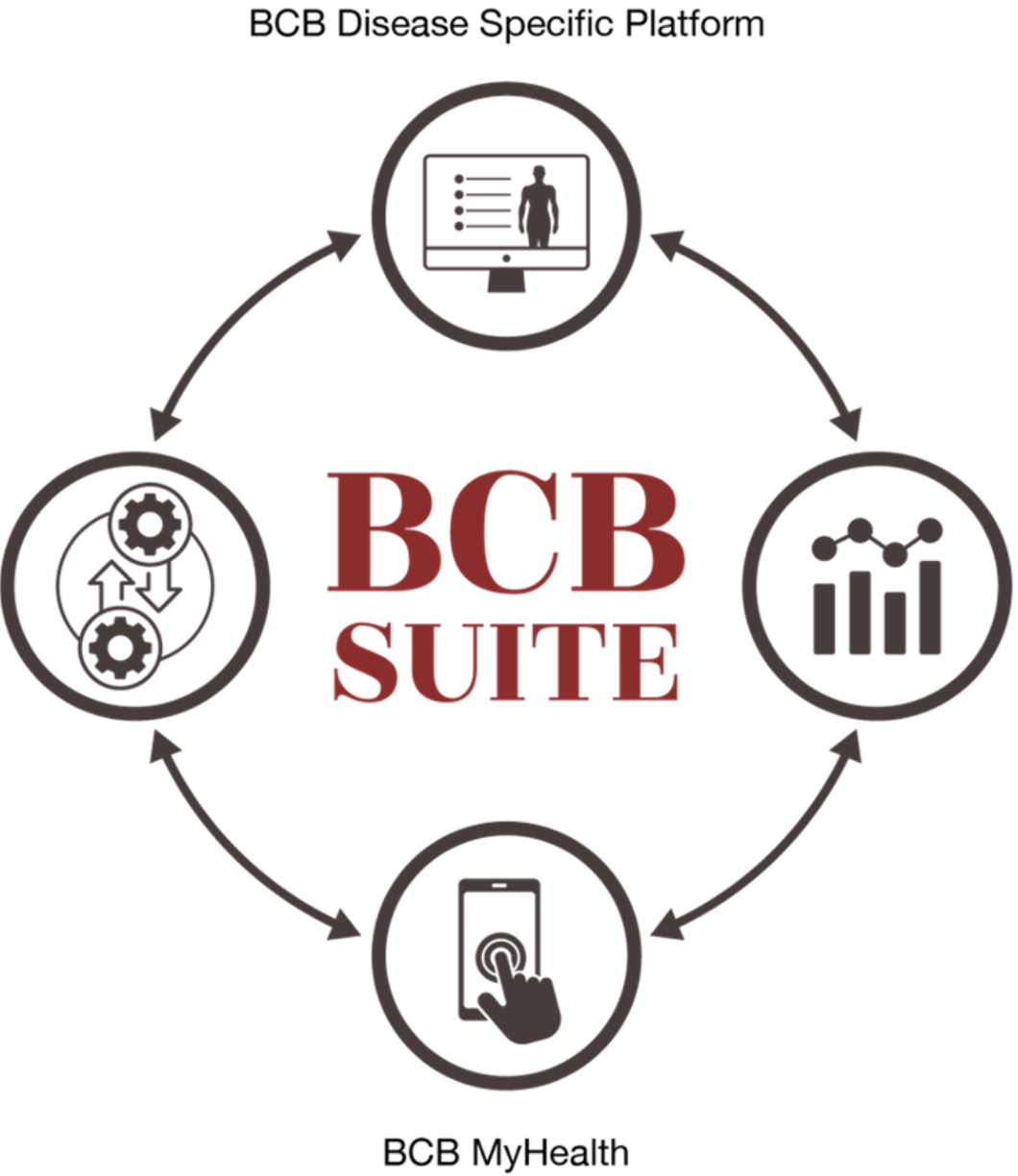
BUSINESS FINLAND

Adusso



FROM COLLECTING TO UTILIZING CLINICAL DATA

OUR SOLUTION

We collect, combine, analyse, and illustrate real-world data from various sources and present it in an understandable format. Our monitoring systems are in active, daily use, and currently cover more than 100 disease groups.

We offer world-class solutions including disease-specific quality registries for healthcare professionals, an intelligent integration platform and MyHealth service, which engages patients in their clinical care and secures that data is collected for best possible primary and secondary use, such as research.

UNIQUENESS AND IMPACT

Our solution offers visibility to relevant treatment information for the health care professionals. Automatically integrated data from various sources saves time and resources for HCPs and helps to prioritise the patient care to those patients who need it most.

Our solution supports improved healthcare processes, adherence to clinical practice guidelines and standards and helps to reduce costs of delivering care. Data is used for different analytics tools for HCPs, national benchmarking, and various scientific research projects with also life science involved.

COMPANY

BCB Medical is a digital software and analytics company. We gather real-world data (RWD) in a structured format on both medical effectiveness and treatment quality.

REFERENCES

Our solutions are used in all hospital districts in Finland, in hospitals in Sweden and in the UK.

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BUSINESS FINLAND

BCB Medical

ESiOR

Creating Insights

Data

Gain insight into your competitive advantage

Analysis

Demonstrate your competitive advantage

Knowledge

Transform insights into action and competitive advantage

Communication

Make a difference with effective communication

www. esior.fi

BUSINESS FINLAND

FROM DATA TO COMPETITIVE ADVANTAGE™

OUR SOLUTION

ESiOR Ltd offers expert solutions for value demonstration of healthcare products, services and processes, as well as the expertise to improve efficiency and cost effectiveness in healthcare. In addition to research and consultancy, we provide tools to support management and decision-making. Our services include health economics and outcomes research, registry studies, surveys, market access, data science applications, narrative reporting, interactive modeling and web-based tools. We are driven by data and aim for credible insights. No stone is left unturned when we work to find the best solutions for our clients.

UNIQUENESS AND IMPACT

We provide the information and tools to make better decisions, gain higher value for money and provide the most effective care. Our social and health economics and outcomes research (SHEOR) services assess the effectiveness and cost effectiveness of medicines, treatments, digital solutions and services. Our data science and evidence generation (DSEG) services compile, generate and demonstrate treatment value and competitive advantage.

COMPANY

ESiOR provides insight to data and evidence for better health outcomes and market access. ESiOR has a strong track record of client success, with 500+ projects and 350+ scientific publications.

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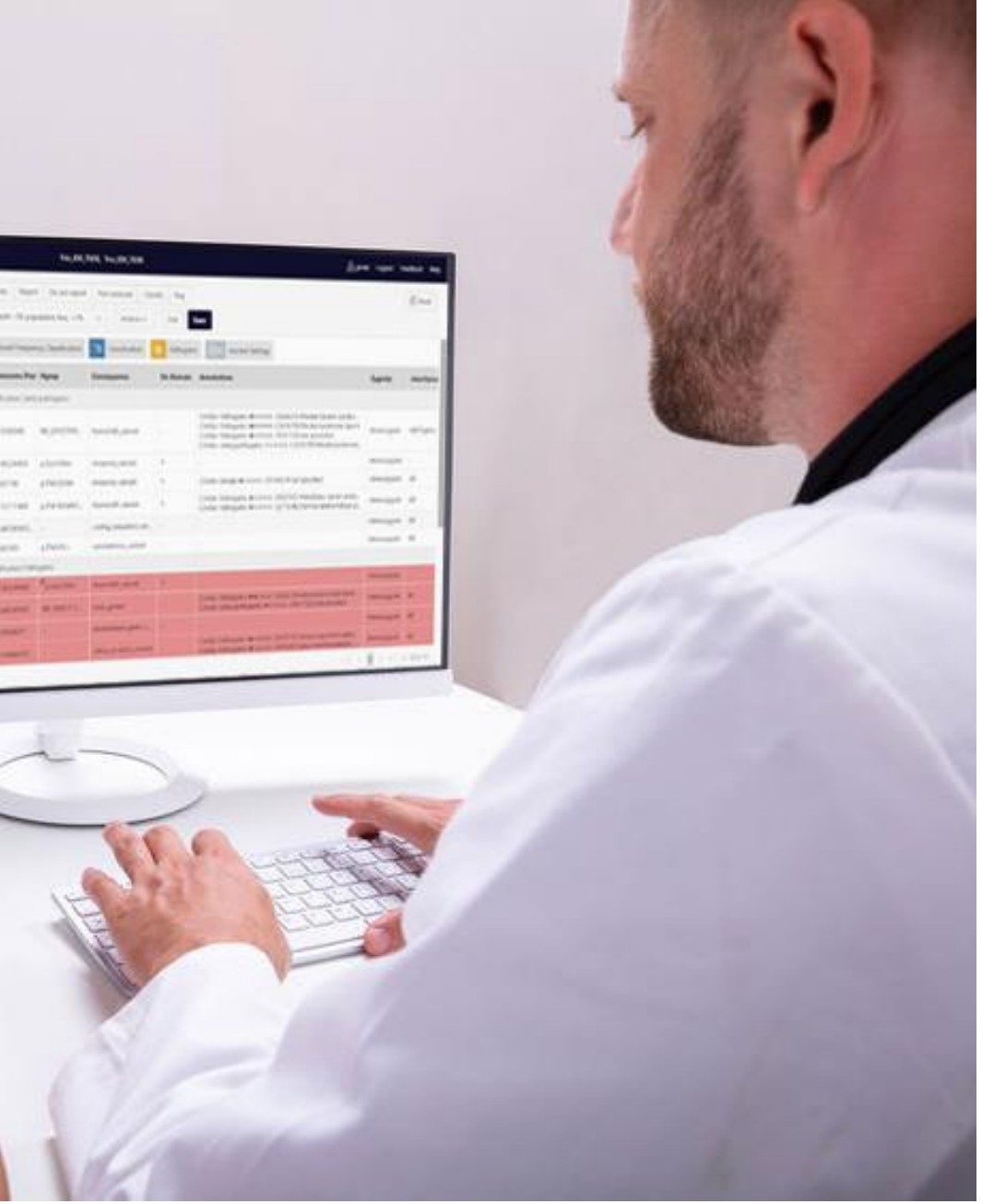
ESiOR



FROM GENOME SEQUENCE TO PRECISE REPORTING

OUR SOLUTIONS

Euformatics's omnomicsSUITE provides all software modules that automate, standardize and speed up genomic variant analysis in oncology, constitutive genetics and rare genetic diseases. It allows diagnostic laboratories to validate all tests and monitor and report on performance in the wet lab, the sequencing instruments and during ensuing bioinformatic procedures. The variant annotation, classification and reporting module is based on best practice guidelines and can be further adapted by the user. Whether analyzing small gene panels or whole genome sequencing, the omnomicsSUITE allows the user organization to build their own knowledge base on top of all integrated population, gene and variant information.

UNIQUENESS AND IMPACT

The modular structure of the omnomicsSUITE allows the user to build a complete end-to-end solution or to fill in gaps in their own existing pipeline. Each software module can be tailored by the user for different usage purposes. User roles make it possible to create analytical procedures and to lock them down for systematic, regular use in a regulated clinical context. Some modules are also available for other species, such as the human microbiome and viruses.

COMPANY

Euformatics is on a journey to make sense of vast amounts of genomic data and enable the transition toward a world of precision medicine. We are developers, bioinformaticians and quality experts.

REFERENCES

Among others HUS Helsinki University Hospital and other Finnish hospital districts. Rigshospitalet, Copenhagen, Denmark. King Chulalongkom Memorial Hospital, Thailand. Queen Mary Hospital, (Hong Kong) China, EMQN, GenQA/UKNEQAS, United Kingdom, Synlab, Unilabs.

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BUSINESS FINLAND

Euformatics

DRUG INFORMATION FOR DECISION SUPPORT

OUR SOLUTION

Lääketietokeskus's Pharmaca Fennica Services are key to safe and efficient medication. Our services contain all relevant information on medicines, such as products, packages, prices, indications, dosages, adverse reactions, pictures, reimbursement, shortages and more. Services are available as structured databases, messaging services and web services. The drug databases can be integrated into healthcare information systems, making reliable medical information easy to access 24/7. Our structured information supports decision-making, promotes medication safety and facilitates treatment. It can be used to notify of overdose risk, propose a suitable dosage based on patient information or as a tool along care paths.

UNIQUENESS AND IMPACT

Pharmaca Fennica Services help healthcare professionals save time for patients. Doctors and nurses find all relevant information on medicines from one source. Our solutions improve efficiency and safety, and structured databases can be used to generate alarms of overdose risk or propose a suitable personalized dosage based on patient information.

Our solutions include information on the environmental classification of medicines, pharmacogenomics, support materials, shortages and alternative products to ensure continuity of drug therapy.

COMPANY

Lääketietokeskus is a reliable and advanced provider of drug information and business intelligence services. We help ensure medication safety and enhance the use of healthcare resources.

REFERENCES

Apotti, the Helsinki University Hospital ERP system by Epic, uses Lääketietokeskus's structured drug databases and web services. This guarantees that the pharmaceutical information available from Apotti is reliable and up to date.

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BUSINESS FINLAND

LÄÄKE TIETO KESKUS

THE BEST MOBILE APP FOR NURSING

OUR SOLUTION

Medanets's app, developed together with healthcare professionals, enables safe and efficient nursing workflows, supports decision-making and leaves more time for care. The app integrates with EHR systems and complements their features. With the mobile app, a nurse can enter and observe patient data at the point of care. Real-time patient records for the whole care team allow faster observation of any changes in the patient's condition and even save lives. Our app reduces the number of erroneous entries by an average of 75%. In a single hospital ward, up to 120 hours a month can be saved.

UNIQUENESS AND IMPACT

Medanets is a truly user-friendly mobile solution for healthcare professionals. The solution helps improve patient safety, quality of care and job satisfaction. It gives professionals more time to devote to what is most important – caring for patients.

COMPANY

Medanets revolutionises healthcare with the best mobile app for nursing. Our customer statements testify to this.

REFERENCES

Sahlgrenska University Hospital, 7 regional hospitals, 9 other hospitals, Sweden. 4 Nordland Hospital Trust hospitals, Norway. A project with NHS trust, including a university hospital and 7 other hospitals, the UK.

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BUSINESS FINLAND

medanets
DIGITAL CARE & HUMAN TOUCH

CLINICAL DECISION SUPPORT FOR DRUG THERAPY

OUR SOLUTION

Medbase has created decision support databases for all important areas of drug treatment. INXBASE is for drug interactions. RISKBASE is for adverse drug interactions. gravbase and lactbase are for pregnancy and lactation. renbase and heparbase are for renal and hepatic impairment, dosebase is for dosing and contraindications. xreactbase is designed for cross-allergies, while herbalbase is suitable for natural medicines.

The databases are easily integrated with electronic health records (EHRs) and other health information systems by API. All databases provide clinical warnings and recommendations on how to circumvent clinical risks. Our solutions are in clinical use in 15 countries across Europe and the Middle East.

UNIQUENESS AND IMPACT

Medbase is fully staffed with medical doctors who have vast scientific and clinical experience in drug treatment. This guarantees the high-level clinical quality of recommendations that improve the quality of prescribing, save time and reduce costs.

Our databases have been localized for 15 countries and are currently running in 11 different language versions. End-user feedback indicates that Medbase data has excellent clinical usability, with scientific proof of improved patient outcome and cost reductions.

COMPANY

Medbase Ltd produces medical decision support databases for healthcare professionals designed to safeguard effective and safe clinical use of drugs. Patient versions for selected databases are also available.

REFERENCES

National solutions in Sweden, Estonia and Lithuania. Market leader in Finland, Poland and Austria. Helsinki University Hospital, Finland. Geneva University Hospital, Switzerland.

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BUSINESS
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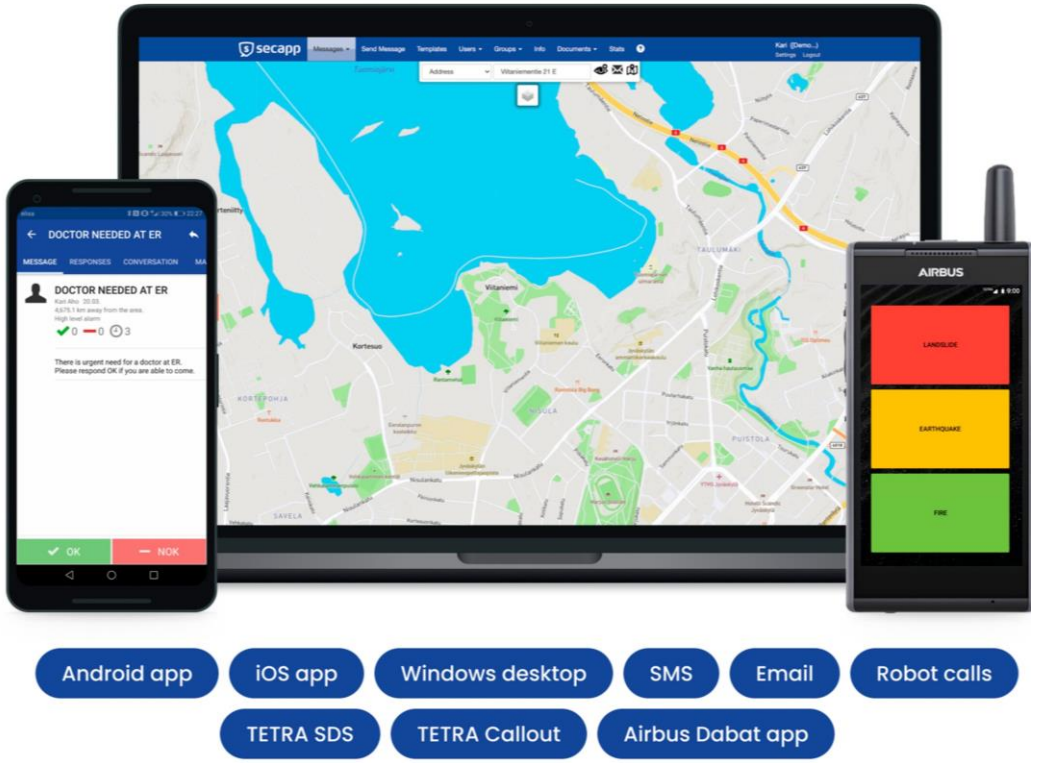
medbase

COMMUNICATION THAT CAPTURES YOUR ATTENTION



OUR SOLUTION

Secapp is a software as a service (SaaS) system for critical communications and alerting that captures your attention in emergencies and daily operations. The application allows dispatching and responding to alerts in a matter of seconds using any device, whether you need to reach a small group of nurses or doctors - or even an entire organization. Secapp combines all commercial apps, SMS, automated calls, and email and authority communication (TETRA) channels into one solution, making it possible to broadcast mass notifications and alerts to individuals and teams and collect and share critical data. Use cases in hospitals: Personnel alerting/dispatching: Filling work shifts, alerting individuals and groups, and coordinating various medical teams Collecting critical data: sharing information on hospital and unit status and resource inventory Safety: Trigger and respond to safety, building, and infra alerts in seconds, with integration to the central system.

UNIQUENESS AND IMPACT

Secapp is secure and highly reliable in times of crisis. It reduces the possibility of human error in critical situations and its data always remains secure and is owned by the customer. Secapp also reduces the number of realized risks. For example, faster response times mean better treatment for patients. The platform enables fast alerting and dispatching, helping save up to 90% of the time normally spent in filling work shifts. It also provides tools for easy data collection and panic buttons and integrations for personnel and property safety. The platform works on any device, which means new investments are not necessary.

COMPANY

Secapp is a secure application SaaS company for versatile organizational and crisis communications. Secapp is trusted by 100,000+ professionals in 10+ countries and by 600+ organisations.

REFERENCES

Trusted by the Ministries Health, major hospitals, ambulance, and related volunteer services in Finland, Estonia, and the Middle East. E.g., The National Intensive Care Coordinating Office in Finland, Kuopio University Hospital, Oulu University Hospital, Turku University Hospital, North Estonian Medical Centre (Regionaalhaigla), and Pärnu Hospital Foundation in Estonia.

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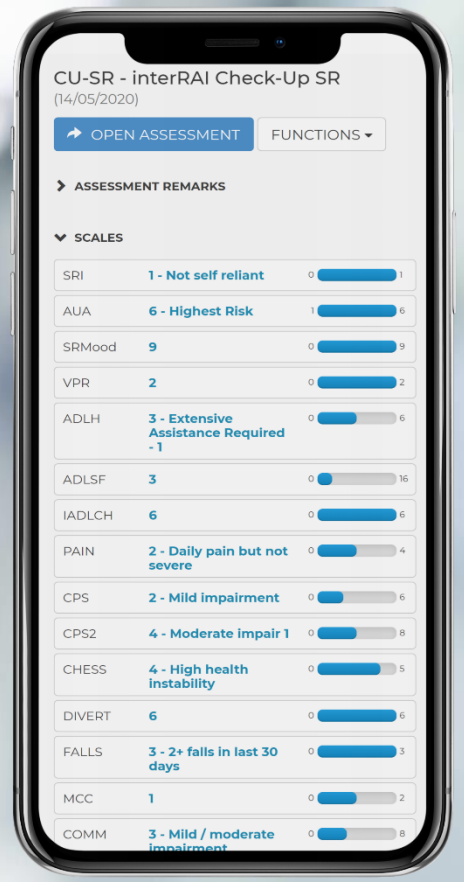
BUSINESS FINLAND

secapp



GLOBAL PROVIDER OF INTERRAI SOLUTIONS

OUR SOLUTION

Raisoft provides versatile digital solutions for care providers and governments seeking to get the most out of evidence-based decision support systems. RAIsoft.net helps you provide top-notch services for vulnerable persons and allocate resources efficiently. With our integrated solution, you are connected to real-time information with applications supporting both care professionals and administrators. We deliver integrated solutions across care settings, including adult and elderly care, acute care and rehab, mental health services, and child and youth care. For discharge planning, for example, our Home Care (HC) and Check-Up (CU) assessment instruments can be used to care for the patient at home.

UNIQUENESS AND IMPACT

For over 20 years, Raisoft has provided interRAI solutions and expertise. We help organizations across the globe extract value from their data through digitalization. Care professionals and administrators always have access to real-time information. Providing the right information at the right time saves both time and money.

With add-on modules and options for electronic health record (EHR) integration, the solution brings documentation and information sharing to a new level.

COMPANY

Raisoft, a Finnish expert and software company, has over 20 years of experience with the RAI system developed by interRAI. The company is the market leader in its field in Finland and Switzerland, with over 60 employees.

REFERENCES

Upon request.

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BUSINESS FINLAND

DATA PLATFORM FOR HEALTH

OUR SOLUTION

TietoEVRY's industry-leading Data Platform for Health enables effective data utilization in medical research, clinical operations, IT and operational development, leading to better care at lower cost. Our CE-marked Data Platform for Health accelerates the digital transformation of the care industry by providing capabilities for rapid application and AI development in a data-driven multi-vendor ecosystem. The solution is built on a hyperscale cloud platform with massive scalability. It provides the latest tech and tooling today – and in the future. Our application suite complements the platform with purpose-made solutions for clinical professionals, researchers, management and IT.

UNIQUENESS AND IMPACT

Data Platform For Health offers the abilities to ingest all data from any data source, transform and integrate datasets to meet business needs, provide access to data via APIs and other methods and control data access with advanced authorization and API management.

The platform is designed to meet the strictest security and privacy requirements of the industry. It is the only CE-marked solution on the market. The solution was developed and is operated by high-end teams with specialized competences and unique experience in running it at scale.

COMPANY

TietoEVRY is a leading digital services and software company that employs 24,000 experts and is headquartered in Finland. We serve enterprise and public sector customers in close to 100 countries.

REFERENCES

Helsinki University Hospital, Kymenlaakso Central Hospital, Etelä-Karjala Central Hospital and Päijät-Häme Central Hospital, Finland.

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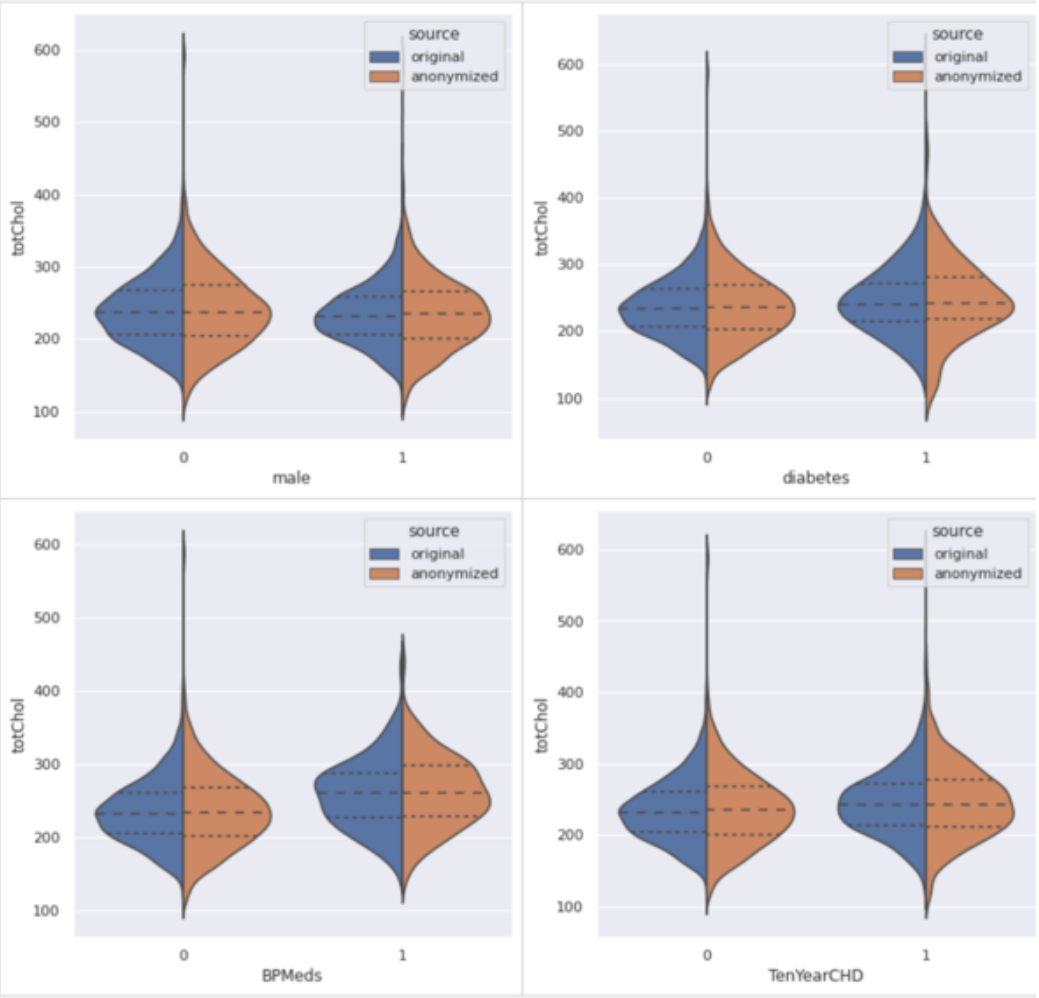
BUSINESS FINLAND

tietoEVRY

VEIL.AI ADVANCED ANONYMIZED DATA –
LOOKS THE SAME AND BEHAVES ALIKE THE ORIGINAL DATA



Violin plot diagrams indicating how closely VEIL.AI anonymized data resembles the underlying multivariate distributions.

BUSINESS
FINLAND

GDPR-FREE ADVANCED ANONYMIZED & SYNTHETIC DATA

OUR SOLUTION

VEIL.AI works for the benefit of patients, hospitals and the whole society. In the future, particularly successful hospitals will be using sensitive big data better for their different stakeholders. This must be done in ways that maximize data utility and preserve privacy. Our unique, patented technology – the VEIL.AI Anonymization Engine – creates extremely high-quality row-level anonymized and synthetic data, helping utilize sensitive health data more broadly than today. It solves the challenging problem of accessing and utilizing patient data in digital health and life science research ecosystems for the development of data-driven treatment and early diagnosis solutions.

UNIQUENESS AND IMPACT

By bringing VEIL.AI anonymization capability to a data lakehouse solution / IT architecture, hospitals can really unleash the power of big data in such areas as personalized medicine, better diagnostics and prognostic modeling by AI-enhanced models and research projects.

VEIL.AI offers a proven solution that can be deployed for various – also federated - architectures. Its key benefits are easier and faster data access, stronger privacy protection, higher data quality and the real-time anonymization of continuous data streams.

COMPANY

VEIL.AI is a leading European health tech company specialized in advanced row-level health data anonymization and synthetic data. We are located at Meilahti Hospital Campus in Helsinki, Finland.

REFERENCES

Recommendations provided separately upon request.

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VEIL.AI
ENABLING USE OF SENSITIVE DATA

8. SAFE SURGERY PLANNING AND OPERATING ROOMS

AI-powered surgery planning tools for operations, VR tools for training, automated patient care pathway coordination and the latest surgical room technologies.

Adesante
Bonalive
Buddy Healthcare
Disior
Injeq
Merivaara
Modulight
Nexstim
Osgenic
Serres
UPM Biomedicals
Varjo

BUSINESS
FINLAND

ZERO SURGICAL FAILURES

OUR SOLUTION

ADESANTE's SurgeryVision is an AI-powered surgery planning tool. When recovering from the COVID-19 pandemic and reducing surgery queues, it is essential that operating theater (OT) time is used effectively. This means fast, easy and yet precise surgery planning to minimize OT time, possible near-miss events, surgical failures and re-operations. In this way, it is possible to best serve the patient. SurgeryVision helps in this mission of reducing surgery queues caused by COVID-19. Its NVIDIA Clara AI module makes detection of a point of interest (POI) faster and easier than ever before. In addition, these POIs can be visualized in virtual reality to gain a better understanding of them. This leads to fewer surgical failures.

UNIQUENESS AND IMPACT

It is proven by Timonen et. al. research that SurgeryVision improves the accuracy of surgery planning. It helps reduce surgical failures, near-miss events, re-operations and even wrongful deaths caused by imprecise surgery planning.

In addition to improving the quality of surgery, operating theater costs are reduced significantly. It is easy to understand the value of the product by valuing the price of a human life. Our company vision is "Zero surgical failures." What is yours?

COMPANY

ADESANTE is a medtech company with great expertise in surgery, medtech, artificial intelligence and machine learning (AI/ML), virtual and mixed reality and other technologies. This expertise has been used to develop the SurgeryVision medical device.

REFERENCES

Our current customers are large university hospitals and smaller private clinics that use MRI and CT images in surgery planning.

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BUSINESS
FINLAND

SurgeryVision™

SMART HEALING COMBATS ANTIBIOTIC RESISTANCE

OUR SOLUTION

Bonalive Biomaterials offers surgical products for bone regeneration and bacterial growth inhibition to restore and replace bone. The products are based on S53P4 bioactive glass, which has been in clinical use for over 30 years and is proven to be efficient against a wide range of bacteria. Bonalive® products are used in orthopedics, trauma, ENT, bone infection and diabetic foot infection surgery and can be used in both adult and pediatric patients. Bioactive glass consists of elements naturally found in the human body; it resorbs over time and is gradually replaced by healthy bone.

UNIQUENESS AND IMPACT

Bonalive® granules is a bone regeneration technology that stimulates bone formation and naturally inhibits bacterial growth without the use of local antibiotics. The inhibition of bacterial growth is based on chemical-physical reactions. The effectiveness has been proven in both gram-positive and gram-negative bacteria, as well as Methicillin-resistant bacteria.

In the face of antimicrobial resistance (AMR), Bonalive presents a new standard for infection treatment. We call this Smart Healing™.

COMPANY

Bonalive is a medical device company headquartered in Finland. We develop and provide clinically evidenced non-antibiotic products for different bone surgery applications. Our vision is to enable a world where infections are treated without antibiotics.

REFERENCES

Our products are used in all university hospitals in Finland and are distributed to hospitals in over 40 countries, including USA.

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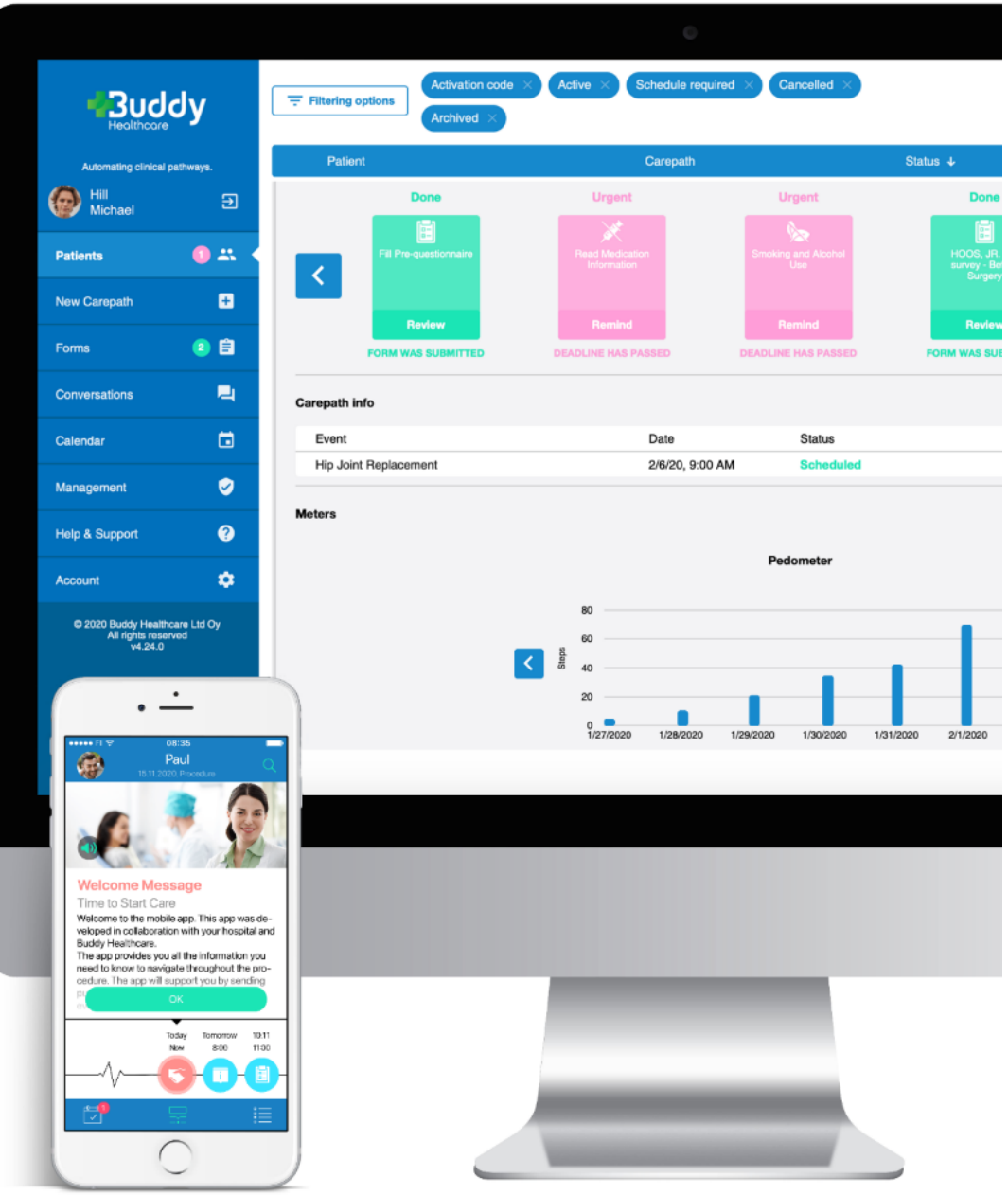
BUSINESS FINLAND

bonalive



CARE COORDINATION PLATFORM

OUR SOLUTION

BuddyCare is a mobile care coordination platform that automates patient care pathway coordination. It allows providers to easily implement their own care protocols and patient journey workflows in a digital format. The BuddyCare app for patients provides all information, tasks, questionnaires and instructions patients need to navigate throughout a care period. The BuddyCare dashboard provides care professionals with real-time views of patients' preparation and recovery procedures, helping them focus on patients that need special attention. Use cases include patient education, pre-op assessment, patient flow management, PREM/PROM collection and remote patient monitoring.

UNIQUENESS AND IMPACT

We know the potential breaking points of care pathways. We can define all relevant practical data and provide a model for empathic communications to the patient in a manner that helps commit the patient to their own treatment. BuddyCare also supports healthcare professionals in providing the best possible care with fewer resources.

Our platform scales across the hospital. It is currently used in over 20 medical specialties and with more than 200 indications. The platform is provided as a white-label solution branded completely in our customers' colors.

COMPANY

Providing the best possible care takes time. We are here to listen. Our solutions are about genuine caring. That is why BuddyCare, the leading care coordination software and service, was created.

REFERENCES

Tampere University Hospital and Satasairaala (Pori), Finland. NHS Lanarkshire, the UK.

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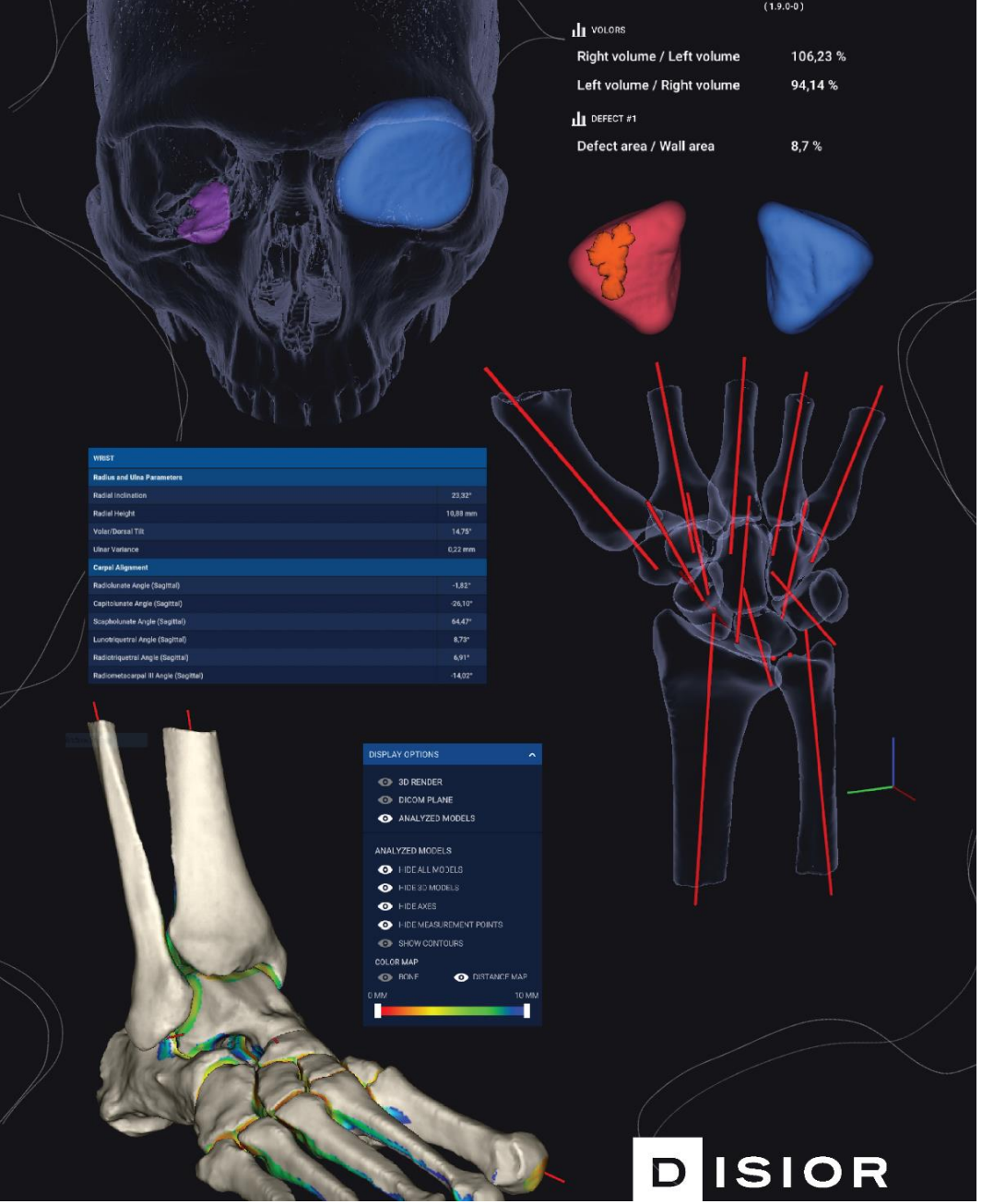
BUSINESS FINLAND

Buddy Healthcare



TRANSFORMING TREATMENTS

OUR SOLUTION

Disior believes doctors should have the best possible tools to help them treat their patients. That's why we bring advanced medical imaging software to the day-to-day work of doctors. Just as engineers use mathematical modeling in industry, so physicians can use mathematical modeling in clinical work. With our software, a clinician can transform medical images into analyzed 3D models within minutes as a part of their standard clinical workflow. Results are available on the spot, providing highly accurate patient-specific 3D models and clinically relevant 3D measurements. These provide validated, objective data for diagnosis, surgical planning and outcome assessment.

UNIQUENESS AND IMPACT

Disior's 3D analytics software is a fast and cost-efficient way to analyze medical images in three dimensions. There are three anatomy-specific modules currently available. Each module enables clinicians to use objective data for diagnosis, create patient-specific surgery plans and assess treatment efficacy. Key benefits include accurate diagnosis with automated, easy-to-use tools, accelerated patient throughput with reliable analysis, improved treatment outcomes through patient-specific surgery plans and enhanced clinical efficacy.

COMPANY

Founded in 2016, Disior develops tools that maximize the benefit of today's 3D medical images for better diagnostics and treatment planning in close collaboration with medical professionals.

REFERENCES

Helsinki University Hospital and Oulu University Hospital, Finland. Cedars Sinai Medical Center, Massachusetts General Hospital, University of Iowa Health Care and University of Utah, the US. Amsterdam UMC, the Netherlands. Canton Hospital Baselland, Switzerland.

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DISIOR

BUSINESS FINLAND

INJEQ IQ-TIP SYSTEM
SPINAL NEEDLE, CABLE AND ANALYZER

OUR SOLUTION

Injeq IQ-Tip® system is designed for safe lumbar punctures (LPs). It provides a real-time detection of cerebrospinal fluid (CSF) when connected to Injeq IQ-Tip® spinal needle with Injeq IQ-Tip® cable. With Injeq IQ-Tip® system a physician can make a lumbar punctures for diagnostics, intrathecal therapy and spinal anesthesia.

UNIQUENESS AND IMPACT

Injeq IQ-Tip system improves patient safety by giving a real-time audio-visual alarm when detecting CSF which can help the physician to avoid causing lesions on the anterior wall vasculature in the spinal cavity.

In Injeq's clinical study of 152 LPs performed on pediatric patients with ALL (2019-2020):

- only 17% of LP performed using the IQ-Tip system were traumatic. Compared to a large, similar, register-based data where the prevalence of traumatic LP was 32% (2 university hospitals).
- first puncture success rate was good 79,5%

Injeq IQ Tip needle is size 22G which is associated with fewer dry taps in neonatal LP.

With Injeq IQ Tip system incidence of post-dural puncture headache (PDPH) is only 6% i.e., considerably less compared to 28% PDPH in LPs done with conventional 20G-22G needle and even less than 11% achieved with atraumatic 20G- 22G needle presented in the literature (Nath et al. 2018 meta-analysis).

COMPANY

Injeq Oy is a Finnish medical technology company founded in 2010 by a team of clinicians and engineers who innovated a real-time cerebrospinal fluid detection method to assist blind lumbar punctures.

Injeq's Quality Management System is ISO 13485:2016 certified and its products have CE approval according to MDR.

REFERENCES

We have a comprehensive distributor network in Europe covering the biggest countries and main markets.

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BUSINESS FINLAND

INJEQ

INTUITIVE SOLUTIONS FOR OPERATING ROOMS

OUR SOLUTION

Merivaara's solutions offer operating rooms a wide range of high-quality products, systems and services. Our award-winning Q-Flow light, Practico and Promerix operating tables and OpenOR integration system improve patient safety and increase the quality and efficiency of surgery operations in leading international hospitals all over the world.

UNIQUENESS AND IMPACT

Functionality and ease of use are at the heart of Merivaara design. Our user interfaces are developed together with hospital personnel so that all our products and systems can be used intuitively. We call this Fluent Usability. Operating room personnel can focus on patient care, not on the management of complex technologies. This is demonstrated by several design awards Merivaara products and systems have received. When designing our products and solutions, we ensure that the choices we make support the sustainable development of our society.

COMPANY

The 120-year-old Merivaara group is a leader in intuitive healthcare technology and industrial design, with surgery room solutions being a key focus and growth area.

REFERENCES

We deliver operating tables and lights worldwide. Our OpenOR integration system has been delivered to over 200 operating rooms in Finland, Sweden, the UK and Russia.

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BUSINESS FINLAND

MERIVAARA

CLINICAL LASER MADE FOR DOCTORS AND PATIENTS

OUR SOLUTION

Modulight's ML7710 is the world's most versatile clinical laser. It is a multichannel, multi-indication medical laser platform. The customer chooses which Modulight lasers are built in. We support all commercially available photosensitizers.

ML7710 offers the lowest total cost of ownership (TCO). ML7710 is already used worldwide for indications like glioblastoma, head and neck cancers, non-small cell lung cancer and uveal melanoma. ML7710 has the CE mark for basal cell carcinoma, non-small cell lung cancer, head and neck cancer and high-grade dysplasia in Barrett's esophagus. In the US and Canada, it has received the ETL mark. It is also CB tested in the US and Canada, the EU, Switzerland, Japan, Singapore and China.

UNIQUENESS AND IMPACT

We help provide more precise and efficient cancer therapy. The feedback signals from the treatment site are uploaded to Modulight Cloud to enable the operating doctor to see whether the treatment is effective and if the drug is present or not.

COMPANY

Modulight Corporation is a Finnish technology company manufacturing complete cloud-connected laser platforms and related software and services for demanding pharmaceutical and technology applications.

REFERENCES

Memorial Sloan Kettering Cancer Center, National Institutes of Health, Roswell Park Comprehensive Cancer Center, Harvard Medical School, University of Pennsylvania and Duke University School of Medicine, the US. UCL Medical School, the UK. Read more.

BUSINESS FINLAND

Seppo Orsila
www.modulight.com

modulight

WORLD-LEADING DIAGNOSTICS & NEUROMODULATION TECHNOLOGY

OUR SOLUTION

Nexstim offers unique technology that allows highly accurate targeting of transcranial magnetic stimulation (TMS) to specific brain regions. The technology integrates TMS with sophisticated MRI navigation and electric field modeling, enabling clinicians to visualize where the stimulation is being delivered. First commercialized for non-invasive pre-surgical mapping of motor and speech cortices of the brain, the technology is now also being used to advance the standard of care in neurology and psychiatry, including care of chronic neuropathic pain and depression. Nexstim offers the only system fully integrated with 3D navigation that has FDA clearances for both diagnostics and therapeutics.

UNIQUENESS AND IMPACT

Through more precise and efficient cancer therapy, Nexstim is helping patients – and their families – get back the life they feared they had lost. In diagnostics, Nexstim nTMS mapping offers you the chance to improve outcomes and your patients' quality of life.

Nexstim helps increase the number of medically necessary tumor surgeries while reducing the post-operative length of stay for your patients. This reduces the overall cost burden to your clinic. In therapeutics, Nexstim offers a new line of non-invasive treatment options for those not responding well to other forms of treatment.

COMPANY

Nexstim is a Finnish globally operating medical technology company. Our mission is to enable personalized and effective diagnostics and therapies for challenging brain diseases and disorders.

REFERENCES

Nexstim is used at top-ranked hospitals with over 200 systems located worldwide, including Boston Children's Hospital (US), University of California, San Francisco Medical Center (US), MD Anderson Cancer Center (US), Charité Universitätsmedizin Berlin (Germany), Klinikum rechts der Isar (Germany), Karolinska University Hospital (Sweden).

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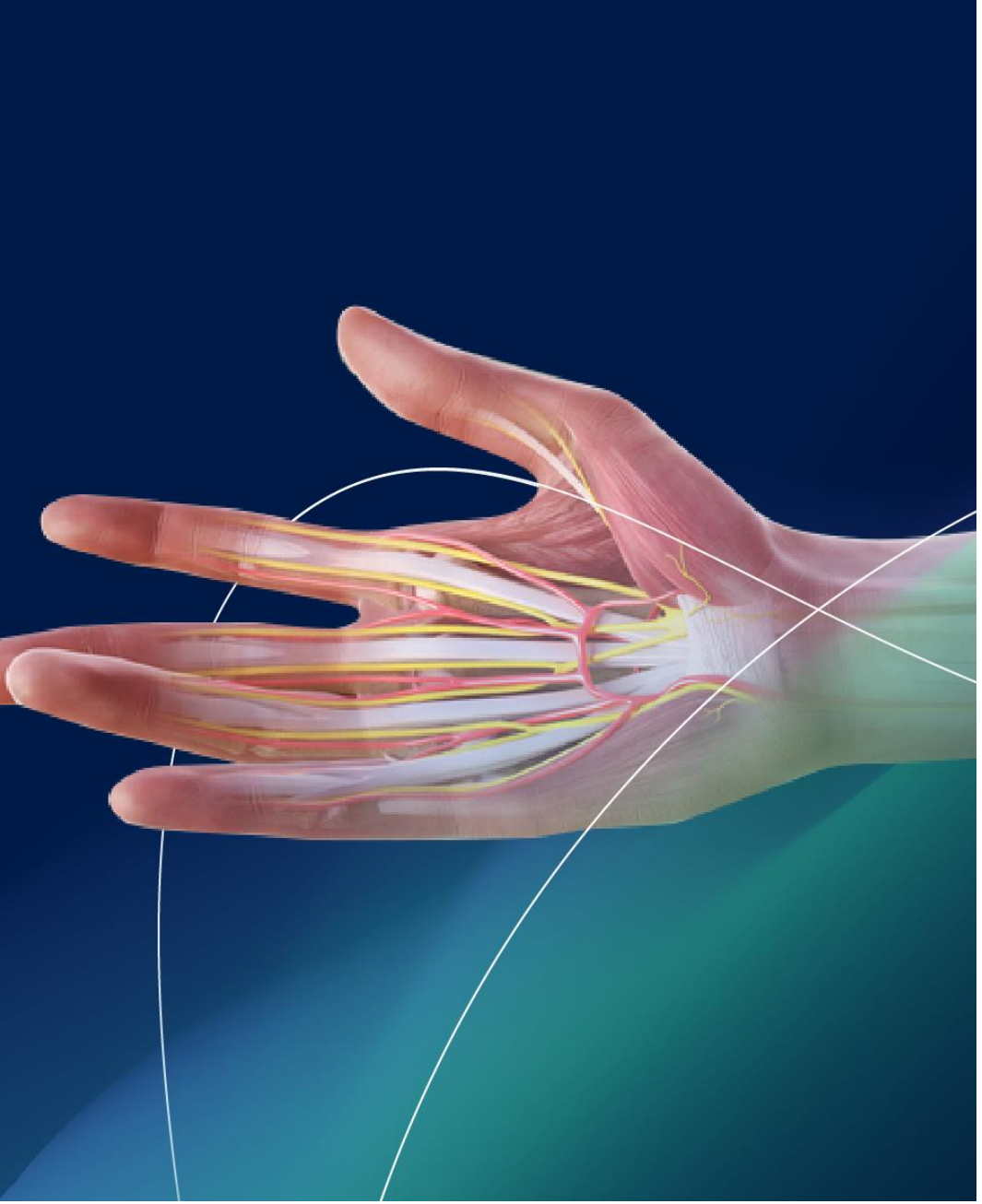
BUSINESS FINLAND

Nexstim



WHERE LEARNING TRANSFORMS REALITY

OUR SOLUTION

Osgenic has created a digital learning platform that integrates virtual reality and e-learning to enable a safe and intuitive way to prepare for surgical procedures and avoid complications. Our solution applies multiple learning principles in a way that integrates with busy hospital workflows. The system features an integrated online learning platform and advanced anatomy-driven virtual reality environments, sold on a yearly license fee. Individual modules can be purchased together or individually. Our solution is created for surgeons by surgeons.

UNIQUENESS AND IMPACT

Osgenic helps fight a global problem all surgeons face during their career – the limited ways to prepare for surgeries adequately and safely without the patient's presence. As a result, surgical complications become a reality, affecting patient outcomes and causing billions in costs for hospitals, insurance companies and societies. Our learning platform leverages the training environment into a mix of virtual reality, e-learning and emerging technologies to create a safe and intuitive way to prepare for surgical procedures.

COMPANY

Our mission is to make surgery safer. We aim to transform the realities of surgical training with our learning platform and virtual reality by providing an intuitive way for surgeons to prepare for procedures.

REFERENCES

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BUSINESS FINLAND

OSGENIC

SUCTION & FLUID MANAGEMENT MADE SMART

OUR SOLUTION

Suction is just one part of the process that makes up modern healthcare. Yet it is an essential part of patient treatment – one that healthcare professionals must rely on completely. Serres, for its part, is dedicated to developing solutions for fluid collection, fluid disposal and fluid management. We ensure that each of these critical phases around suction works, so that hospital staff can focus on their jobs more effectively. Our expertise around suction has centered on fluid collection since the 1970s. We have provided suction bags and canisters as part of the Serres Suction Bag System, while at the same time serving hospitals and healthcare facilities around the world.

UNIQUENESS AND IMPACT

Serres Suction Bags are an essential around the hospital, making fluid collection reliable and convenient. Serres medical consumables are designed & manufactured with an emphasis on sustainability by considering the impact across the healthcare lifecycle. Serres Nemo, on the other hand, creates value from a cost-efficiency, work efficiency and occupational safety point of view, making fluid disposal safer, easier and more hygienic than ever before. Finally, Serres Saga transforms manual liquid handling in ORs to smart surgical fluid management.

COMPANY

Serres is the progressive leader in smart, medical fluid management. Our solutions are used in 60 000 operations daily around the world and our fluid management device revolutionizes OR workflows.

REFERENCES

Marien-Hospital Erwitte, Germany

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BUSINESS FINLAND

serres

WOOD-BASED WOUND DRESSING

OUR SOLUTION

UPM Biomedicals's FibDex® is a novel sustainable one-time-application wound dressing that peels away from the treatment site by itself once healing has occurred, saving the patient painful dressing changes. FibDex® is a nanocellulose-based product manufactured from renewable and responsibly sourced Finnish birch wood. It has been developed in collaboration with researchers from the University of Helsinki, Faculty of Pharmacy, as well as with surgeons from the Helsinki Burn Centre. FibDex® wound dressing has been designed to improve the efficiency of wound treatment by offering superior performance and improved healing results.

UNIQUENESS AND IMPACT

FibDex® detaches itself from the wound after epithelization and avoids painful dressing changes. The dressing provides a more comfortable solution for the patient. At the same time, it saves valuable nursing time that can be better allocated to patient care. The nanocellulose in FibDex® maintains an optimal moisture balance for wound healing, providing ideal conditions for epithelization.

As FibDex® is applied only once to the wound, it does not require changes. It reduces environmental waste in hospitals, thereby reducing environmental load.

COMPANY

UPM Biomedicals produces high-quality nanocellulose and products for the medical field. We are part of UPM-Kymmene Corporation, the Biofore Company that creates value from renewable and recyclable materials.

REFERENCES

FibDex® was launched in Finland at the end of 2020. Since then, FibDex® has been tested and been in use at most Finnish hospitals.

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BUSINESS FINLAND

UPMBIOMEDICALS

MEDICAL VR – WHEN PRECISION MATTERS

OUR SOLUTION

Varjo's human-eye resolution virtual and mixed reality headsets take medical professionals to a higher level of focus and emotional engagement. With true-to-life virtual and mixed reality (VR/XR), medical personnel can prepare for the most challenging real-life scenarios. Our industry-leading full-frame Bionic Display™ brings to life high-detail 3D visualizations with better contrast, better color accuracy and sharper image quality than ever before. You can see displays, medical instruments, text and other elements in human-eye resolution – just like in real life. It's another level of realism that feels more natural and emotionally engaging.

UNIQUENESS AND IMPACT

Easily train and switch between medical scenarios. With Varjo headsets, medical professionals can train and collaborate in a shared immersive reality, improving ways of working, communicating and readiness for any medical scenario.

You can stay in the same room with the same team and then easily switch from one scenario to another. You can train and collaborate with other clinicians on real medical scenarios, transferring knowledge and improving procedural understanding before operations.

COMPANY

Varjo is a Finnish manufacturer of virtual and mixed reality headsets. Varjo develops VR/XR technologies for industrial use, merging the real and virtual worlds together in human-eye resolution.

REFERENCES

https://varjo.com/blog/vr-is-the-future-of-surgical-training-and-vr-1-is-the-piece-of-the-puzzle-thats-been-missing-arne-schlenzka/

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BUSINESS FINLAND

9. HOSPITAL AT HOME DIGITALLY ENABLED CARE

Latest remote monitoring technologies, hospital-like care in the comfort of your home and digital communications for professionals and patients.

Bittium
BeeHealthy
BrainCare
Cardiolyse
DBC Global
Fibion
HealthFox
LivingSkills
Medeka
Medixine
Ninchat
Popit
VideoVisit
VitalSighum
Adamant Health
PulseOn

BUSINESS
FINLAND

Photo: Eeva Anundi

REMOTE MONITORING MEDICAL TECHNOLOGIES

OUR SOLUTION

Bittium provides solutions for the remote monitoring of patients outside the hospital, creating new opportunities to minimize healthcare costs. We offer high-tech solutions for home sleep apnea testing (HSAT), cardiac and real-time EEG monitoring to enable early detection of abnormalities. This speeds up the diagnosis and further treatment of the patient. All our solutions are integrated with the cloud-based Bittium MedicalSuite™ service platform that enables the analysis of data regardless of location.

UNIQUENESS AND IMPACT

Bittium provides comfortable devices that can be worn for long periods of time while connecting to a cost-effective, high-quality remote analysis service. In the field of home sleep apnea testing or cardiology, solutions for outpatient examinations have been imprecise because of insufficient biosignal recordings.

A new generation of intelligent solutions can make life significantly easier for medical staff and patients. Remote solutions are much more cost-effective than examinations in hospitals, and resources can be allocated more efficiently.

COMPANY

Bittium provides reliable and secure solutions for the measurement and monitoring of biosignals in the areas of cardiology, neurophysiology, rehabilitation, occupational health and sports medicine.

REFERENCES

EEG monitoring at Oulu University Hospital, Finland. Cardiac ECG monitoring in Region Hovedstaden, Denmark.

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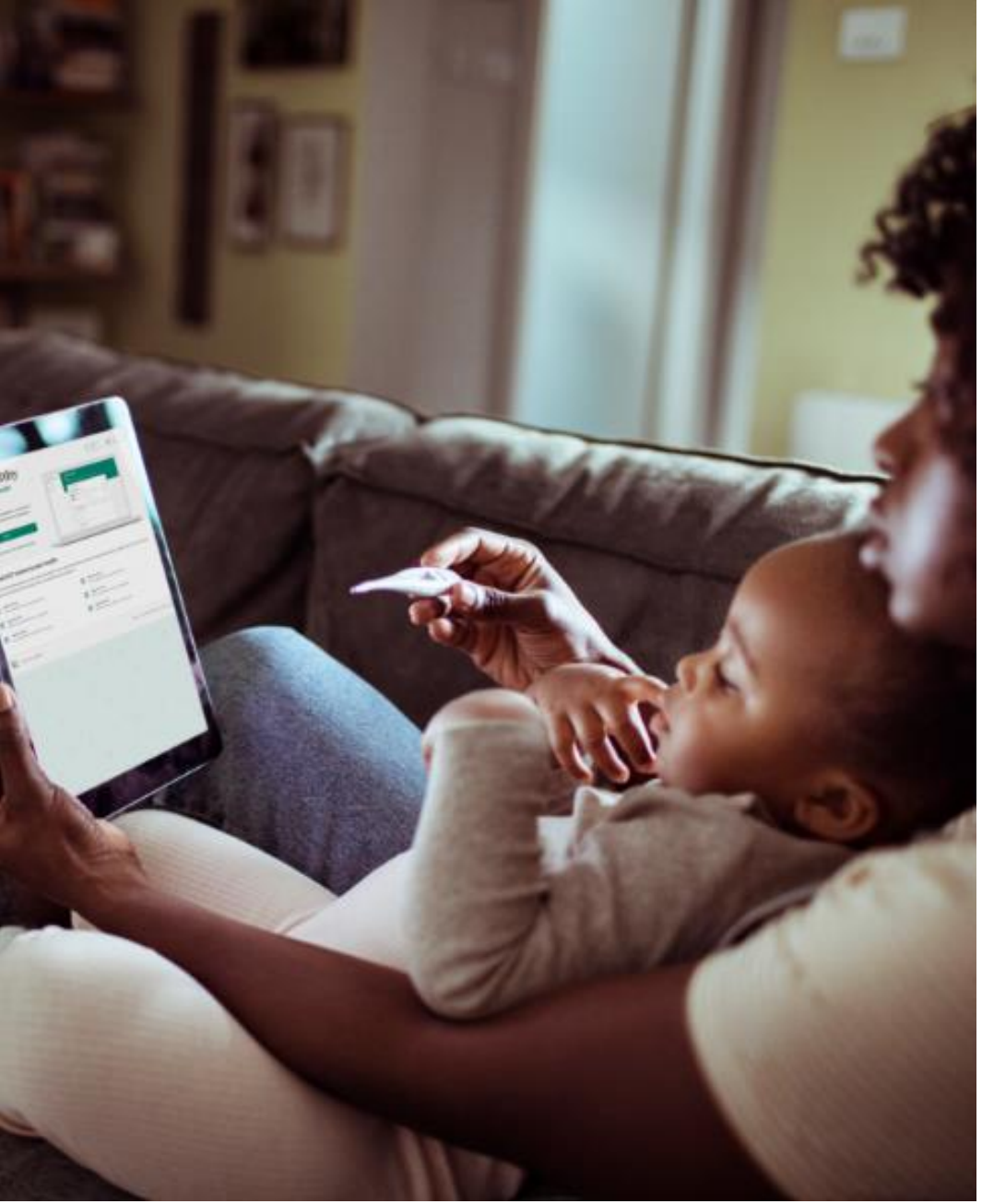
BUSINESS FINLAND

Bittium



ON A MISSION TO MAKE HEALTHCARE SMARTER

OUR SOLUTION

BeeHealthy is a customizable, module based, white-label software as a service platform for both patients and health care providers. It enables you to offer your patients personalized, streamlined and comprehensive mobile health services remotely, cost efficiently, with proven business impact and with outstanding customer experience.

UNIQUENESS AND IMPACT

For your patients

- 24/7 access to appointment booking and to own personal health records.
- Easy access to health care professionals within minutes via Digital Clinic.
- Diverse levels of professional support available via chat depending on the needs of the patient.
- High customer satisfaction without compromising the episode treatment value.

For your physicians

- Digital Clinic with triage.
- Guided and customizable patient journeys.
- Automated chronic care treatment paths.
- Intelligent data-driven symptom assessment and risk assessment algorithms to improve patient safety and increase efficiency.
- Integrated reporting and monitoring.
- 3–5 times higher productivity.

COMPANY

BeeHealthy Oy (owned by Mehiläinen Oy) offers digital healthcare software, solutions, and services to healthcare providers and players in Europe, Middle East and Africa (EMEA) region.

REFERENCES

BeeHealthy provides digital healthcare solutions to global healthcare pioneer Mediclinic International across their three divisions in Switzerland, Southern Africa (South Africa and Namibia) and the United Arab Emirates ("UAE") and to a private hospital and medical service provider Hellenic Healthcare Group in Greece.

BUSINESS FINLAND

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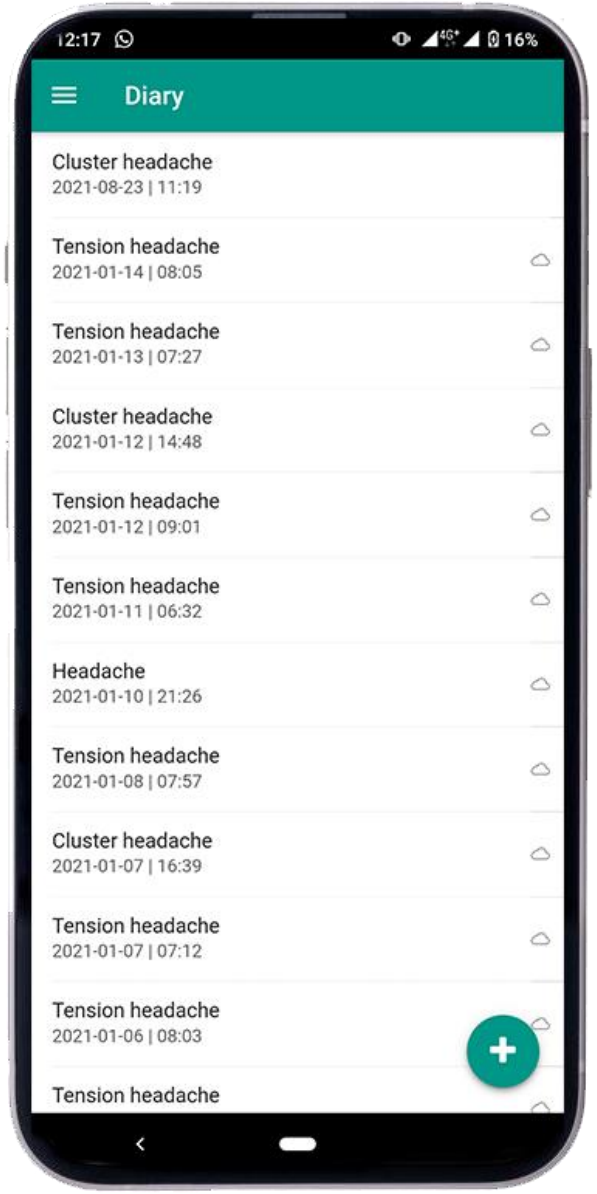
BeeHealthy



ULTRA-LONG-TERM NEUROLOGICAL MONITORING

OUR SOLUTION

SOENIA® offers CE- and UKCA-marked ultra-long-term remote monitoring and digital therapeutic (DTx) solutions to improve digital care pathways for neurological and psychiatric diseases. Our clinically proven system delivers patient-reported symptoms in real time to healthcare providers. Additionally, we are developing a complementary subdermal SOENIA® UltimateEEG™ implant for monitoring electroencephalograms (EEG). Our regulatory approvals are based on clinical studies performed at Tampere University Hospital, Finland. Standardized, real-time monitoring increases the quality of care for all patients, improves treatment adherence and aids in more efficient treatment optimization.

UNIQUENESS AND IMPACT

SOENIA® Medical Diary and Cloud removes the need to process paper diaries, reduces time spent interviewing patients about symptoms and enables remote visits, treatment optimization, patient prioritization and efficient time management.

In the future, we will couple patient-reported symptoms with continuously recorded multichannel subdermal SOENIA® UltimateEEG™ implant data, creating rich real-world evidence (RWE) datasets. Professionals will have data from before, during and after home treatments to assess efficacy.

COMPANY

BrainCare Oy is a Tampere University of Technology spinoff company founded in 2013. Recognized for our excellence in medical innovation, we have been granted six international patents for our technology.

REFERENCES

Paid pilots and customers with Tampere University Hospital and SOITE, Kokkola, Finland. Clinical trial agreements with Tampere University Hospital, Finland.

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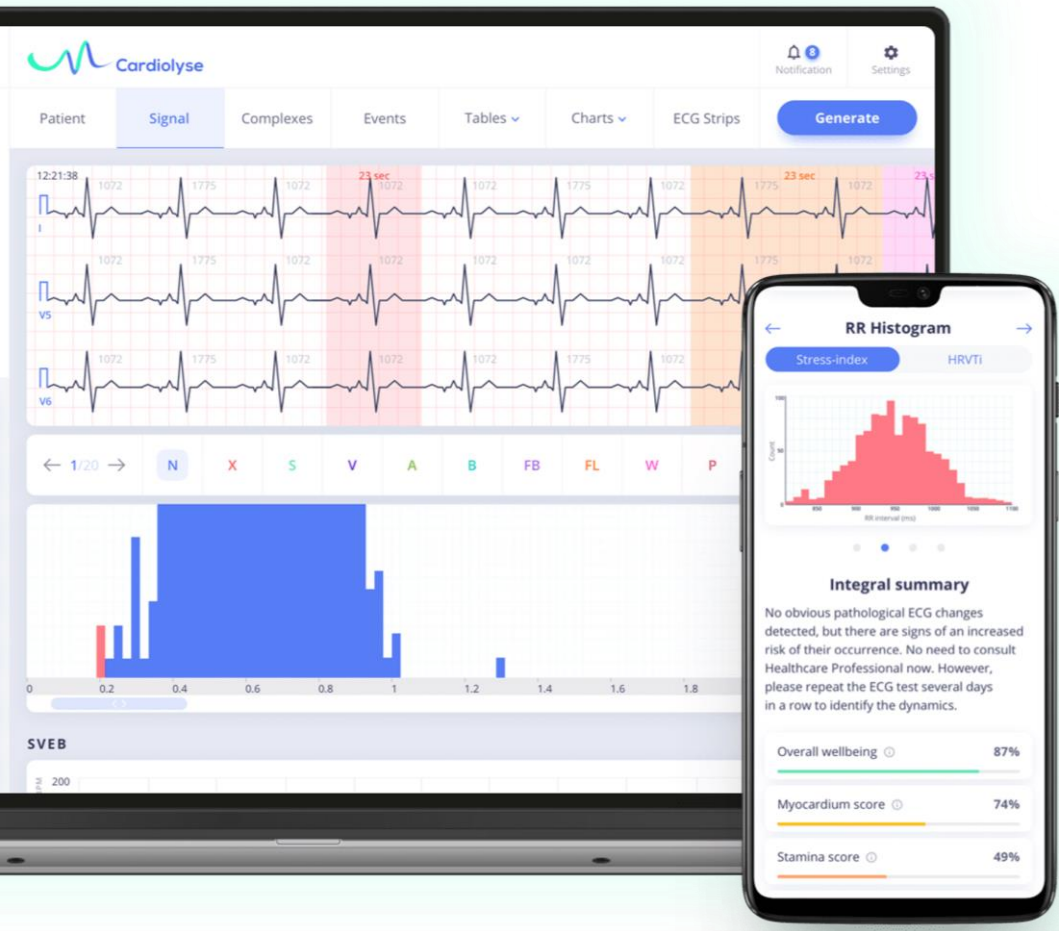
SOENIA®

BUSINESS FINLAND

POST-DISCHARGE REMOTE MONITORING SOLUTION



OUR SOLUTION

Cardiolyse provides a chronic and post-discharge cardiovascular disease (CVD) patient monitoring platform with connected home-use devices, cloud-based heart health AI analytics that enables remote vital sign monitoring, and personalized patient reports for early diagnostics and better care. Medical-grade CE-marked algorithms, a patented Universal ECG Scoring System and a Personal Baseline calculation allow the detection of most common arrhythmias and heart health conditions, as well as stress, emotion and fatigue risks. It also helps predict dangerous heart health events before they occur. We enable hospitals to act on alerts in advance to reduce readmissions, providing better care and saving costs.

UNIQUENESS AND IMPACT

Cardiolyse offers a patient centric approach with a holistic view and a long-term relationship. Our solution combines medical (ECG) and wellness (heart rate variability (HRV)) data analytics. Algorithms and scoring systems have been tested and validated in the market by well-known organizations, including Oxford University. Our patented scoring system allows patients to feel engaged.

We offer a wide scope of analytics with more than 300 heart health parameters analyzed. This includes cardiac and fatigue risk assessment and monitoring. We are able to provide a prediction up to 2 months in advance.

COMPANY

Cardiolyse is a Finnish-based health-tech company founded in 2016. The team has a strong business and medical background, including research leaders, data scientists and developers.

REFERENCES

Oxford University Hospital, NHS, UK; GVM Hospital Group, Italy

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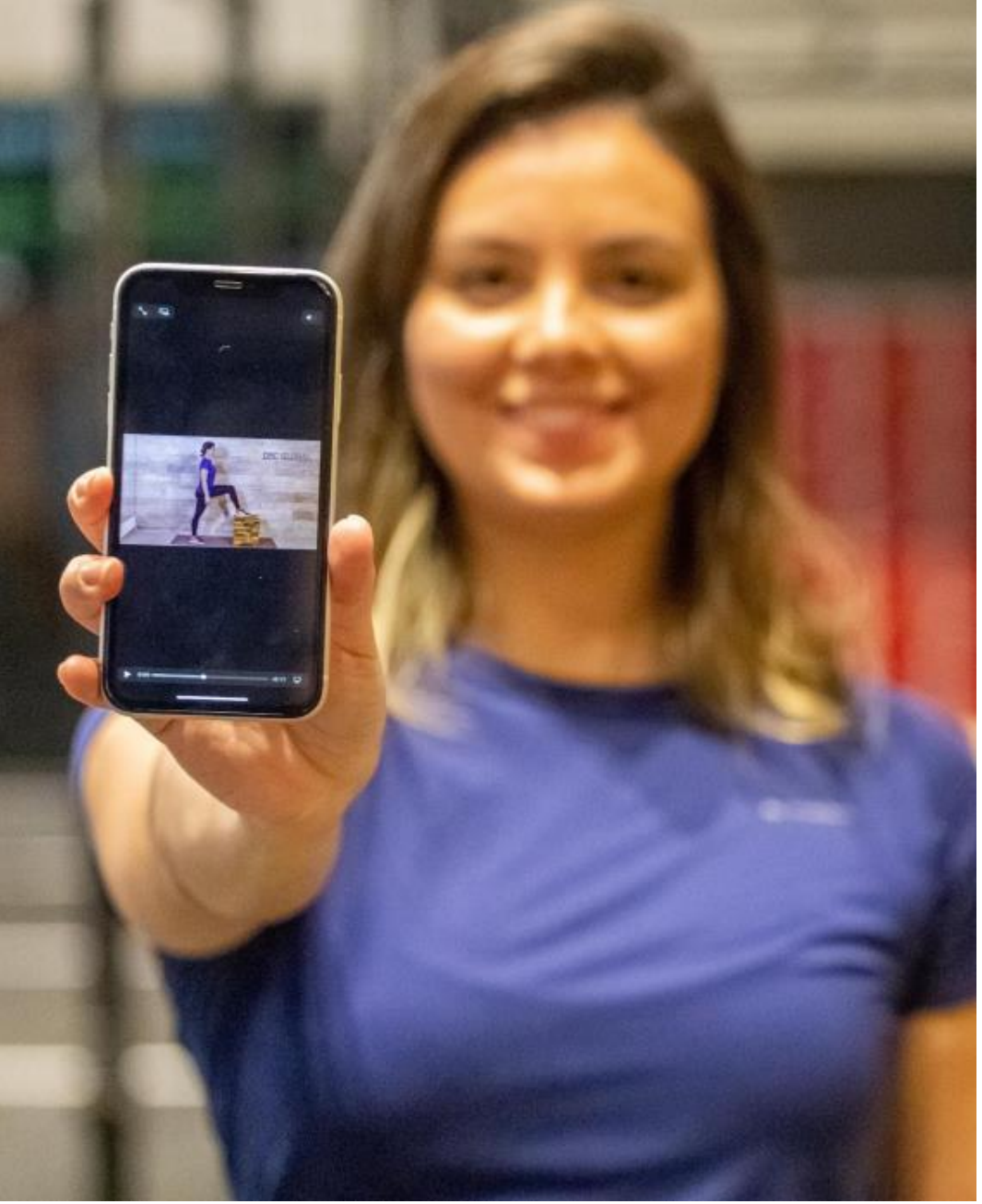
BUSINESS FINLAND

Cardiolyse



EVIDENCE-BASED MEDICINE SOLUTION FOR MSK DISORDERS

OUR SOLUTION

DBC Global has a scientifically and clinically proven, scalable solution to address musculoskeletal (MSK) disorders affordably with a more than 90% success rate. Today, MSK disorders are the #1 global health burden reducing personnel's ability to work and increasing absenteeism, healthcare costs and the consumption of opioids. DBC's solution is based on 27 randomized controlled trials (RCTs) and 25 years of clinical expertise from 24 countries. The DBC solution covers risk assessment and optimal non-surgical interventions for all risk categories. It uses an advanced telehealth solution for low-risk patients, systematic treatment protocols for medium-risk patients and proven extensive treatment protocols with unique DBC functional restoration devices for high-risk patients.

UNIQUENESS AND IMPACT

The DBC MSK solution covers the whole continuum of care. It starts from risk assessment and optimum treatment intervention based on the patient risk category using digital and clinical treatment methods, including medical outcome reporting. It decreases the number of unnecessary expensive surgeries for backs, shoulders and knees, freeing up operating room capacity. The DBC solution can be used for post-op rehabilitation to speed up a patient's return to work. The DBC full continuum of care concept increases a hospital's patient capacity with sustainable medical outcomes.

COMPANY

DBC Global Ltd uses an audited ISO 13485 quality system in its operations. The DBC full continuum of care solution is classified as a medical device and complies with GDPR, LGPD and HIPAA.

REFERENCES

Rumah Sakit Umum Pusat Fatmawati Hospital, Gading Pluit Hospital, Dr. Soeharso Ortopedic Hospital and Klinik Utama Halmahera Medika, Indonesia.

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BUSINESS FINLAND

DBC GLOBAL

DISCRETE WEARABLE ACTIVITY SENSOR

OUR SOLUTION

Fibion SENS enables physical activity monitoring in healthcare environments, such as hospitals and care centers. The system increases patient self-mobilization and delivers accurate measurements to assist the treatment or rehabilitation process. Fibion SENS consists of a waterproof activity sensor for use on patients, a medically approved patch to conveniently attach the sensor and a patient app with gamification feedback for increased mobilization. The solution uses a cloud server for data and remote sensor control. Caregivers can access reports on patient activity.

UNIQUENESS AND IMPACT

Many patients are inactive 18–20 hours a day in the hospital bed, and body functions decline rapidly during hospitalization. Therefore, rehabilitation during hospitalization is crucial to avoid loss of independence, decline in the quality of life and rehospitalization. Physical activity and avoidance of excessive sedentary behavior are also of great importance to prevent chronic diseases.

Our cloud-based solution helps with effective behavior change for better health.

COMPANY

Fibion is a Finnish company that develops and sells products and services for the accurate assessment and interpretation of everyday sitting and physical activity habits.

REFERENCES

Bispebjerg Hospital, Denmark.

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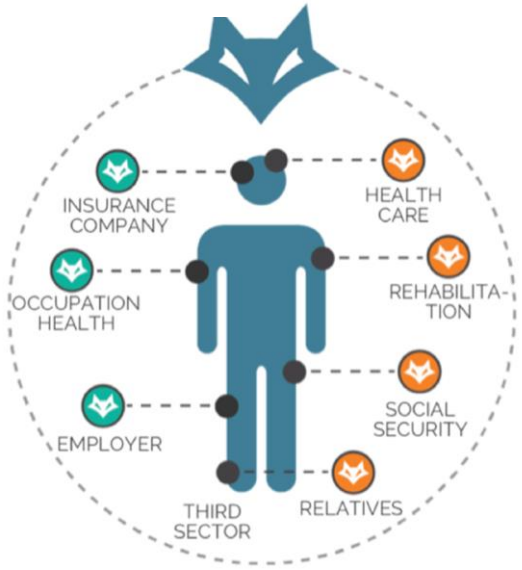
BUSINESS FINLAND

Fibion

HOLISTIC PATIENT CARE



CARE ECOSYSTEM

EASIER TOMORROW APPLICATION

OUR SOLUTION

HealthFOX Easier Tomorrow offers an all-in-one patient-centric digital health solution for remote and outpatient care needs and connecting the entire healthcare team and care chain into one integrated platform. We create accountable patients through automated, semi-automated and assisted self-care pathways. Our cognitive behaviour therapy solutions improve patient's motivation and adherence to care. With machine learning algorithms, the system TRIAGE patients, highlighting the focus for care, empowering the doctor to prioritize their time and area most needed of treatment, and allowing therapists to see more patients digitally than in a conventional way. The service concept improves the professional time efficiency, the quality of care, and the patient's quality of life.

UNIQUENESS AND IMPACT

We are solving the problem of fragmented care by creating accountable patients. HealthFOX's state-of-the-art healthcare service concept improves doctors' time efficiency by up to 5 times. As of today it increases the number of patients a therapist can see by 14 times. It saves direct costs by up to 30% and reduce patient's life cycle cost up to 50%. Benefits for patients are also numerous. A patient can start therapy immediately. The treatment includes holistic patient support and a progressive self-care program to improve outcomes. Every patient has the opportunity to complete the treatment and improve their quality of life.

COMPANY

HealthFOX was founded in 2014 to provide easier access to healthcare and a state-of-the-art digital user experience for everyday use. We provide all tools, skills and resources to digitalize the healthcare journey; improving the optimal health balance and timely return to normal life by providing the equal access to healthcare for all.

REFERENCES

Helsinki University Hospital, Turku University Hospital and Lapland Hospital District, Finland. HealthFOX Southern Africa as a subsidiary company to improve digital healthcare and rural health.

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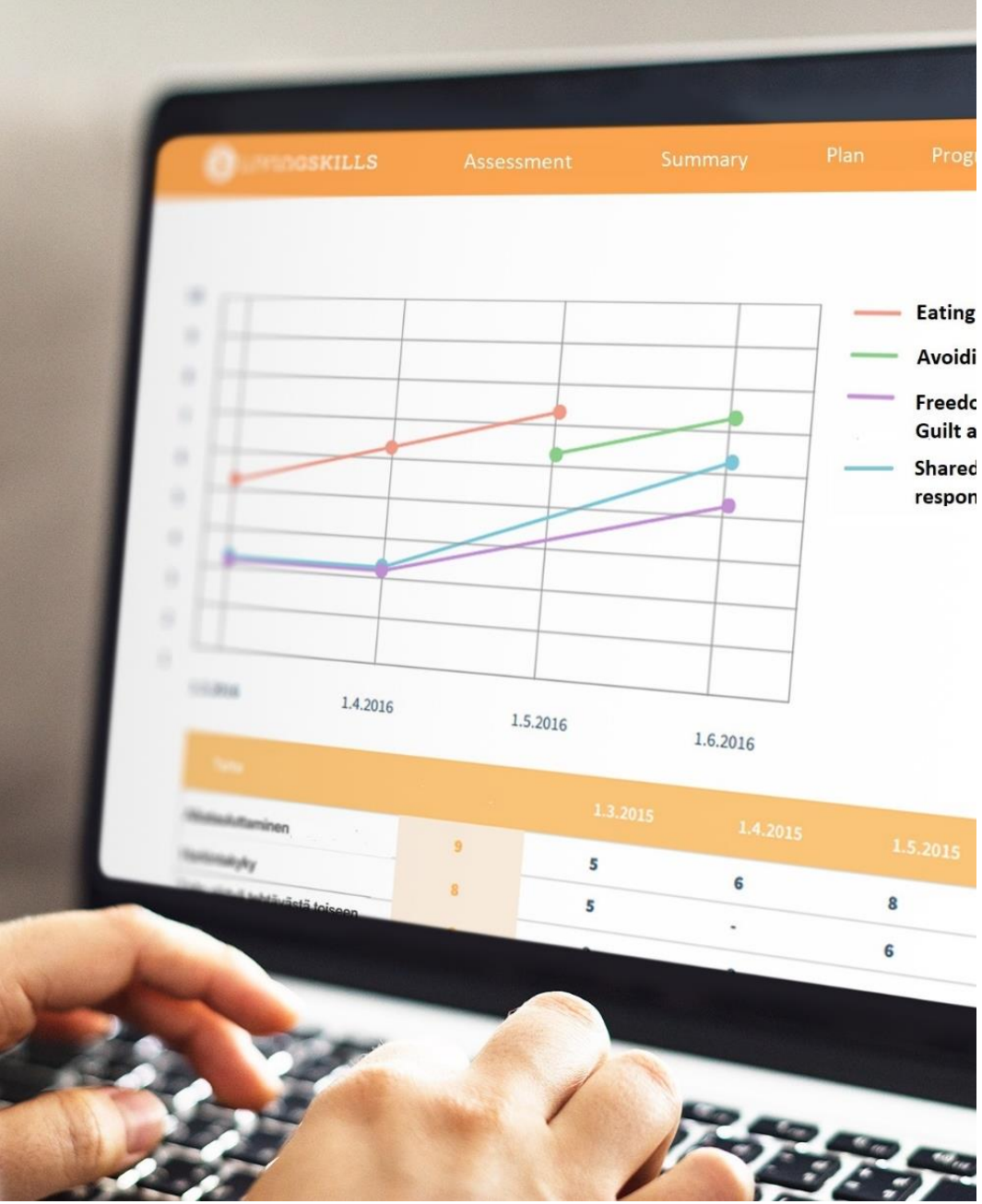
BUSINESS FINLAND

HEALTHFOX



FAMILY-BASED TREATMENT OF EATING DISORDERS

OUR SOLUTION

LivingSkills offers tools for professionals to battle against eating disorders. Mortality in anorexia is almost 6-times higher than in the same age group. The New Maudsley Method is the most effective but underused method. Professionals support parents, and parents help their child to battle with the eating disorder. LivingSkills offers you the solution to implement the method: Online training for professionals, and digital toolkit to motivate young patients and support parents. With LivingSkills you can effectively train experts in the application of the method and engage parents in the outpatient treatment of their child.

UNIQUENESS AND IMPACT

Eating disorders have the highest death rates of all mental illnesses. With the family-based method you can save lives of young people. Chronic diseases and injuries are prevented. You will get efficiently more qualified professionals to support patients and families. Nurses get hands-on tools to facilitate parental participation in outpatient care. This means more resources and significant savings. And last but not least, the quality of life and functioning of the patient and family will improve.

COMPANY

LivingSkills Ltd. offers digital tools for psychosocial support in social and healthcare. We specialize in putting the patient first to ensure motivation. Our company is based in Tampere, Finland.

REFERENCES

Family-Based Treatment of ED, training for nurses and nutrition therapists. Sep 2021-Apr 2022, Siun Sote Health District, pop. of 166,000 in Finland.

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BUSINESS FINLAND

LIVINGSKILLS

VIRTUAL MOTIVATION FOR REHABILITATION

OUR SOLUTION

Medeka believes in motivating rehabilitation in hospital physiotherapy wards for every ordinary patient.

Medeka's product is a virtual route software for rehabilitation and indoor exercise for the elderly and special groups. The software includes over 300 self-filmed, authentic routes. Intended for ordinary people, the solution is not for gym heavy users. Patients can exercise with existing devices, such as bikes, handwheels, treadmills and other equipment. The workouts are no longer boring. You can follow real routes shown on the TV or other screens while training.

UNIQUENESS AND IMPACT

Medeka offers a totally different way to approach the problem of motivating patients needing hospital rehabilitation to use virtual digital technology.

COMPANY

Medeka is a small company. Still, the owner and the company team have long experience in the field of hospital IT and mobile technology, as well as in the field of sports business and training.

REFERENCES

Kankaanpää Rehabilitation Center, Oulunkylä Rehabilitation Hospital and Kruunupuisto Rehabilitation Center, Finland.

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BUSINESS FINLAND

Medeka

ALL-IN-ONE TELEHEALTH PLATFORM

OUR SOLUTION

Medixine Suite is an all-in-one platform for virtual care used in several countries. It offers easy and intuitive tools for both healthcare professionals and patients, including:

- Remote patient monitoring
- Video consultations
- Secure messages
- Secure chat
- Automatic triage
- Large scale population screening

Medixine Suite enables smooth collaboration between healthcare providers, patients, and family members and increases the patients' active role in their own wellbeing. The platform supports different languages and cultures and can be scaled to a large number of users. It can also be integrated into other digital systems and EHRs.

UNIQUENESS AND IMPACT

With Medixine, healthcare professionals do not need to learn many different digital systems. Our all-in-one platform has all the tools needed and can be used with any diseases or condition. It helps reduce manual work and saves resources for those patients that really need face-to-face care. Modern remote care and remote patient monitoring (RPM) are essential tools for healthcare. The tools support medical professionals in their work and increase patients' control over their own wellbeing. They also reduce the risk of hospitalization and shorten hospital visits. From the human perspective, telehealth solutions have proven to reduce patients' anxiety and support them in their daily lives.

COMPANY

We want that healthcare professional can focus on the most important: the patient. Our 21 years of experience in the digital healthcare sector gives us a deep understanding of our customers' needs.

REFERENCES

Medixine Suite is a proven platform is use in several countries: Linde Healthcare, two hospital areas in Denmark, Nestle Health, University hospitals in Helsinki and Tampere, NHS service provider Howz.

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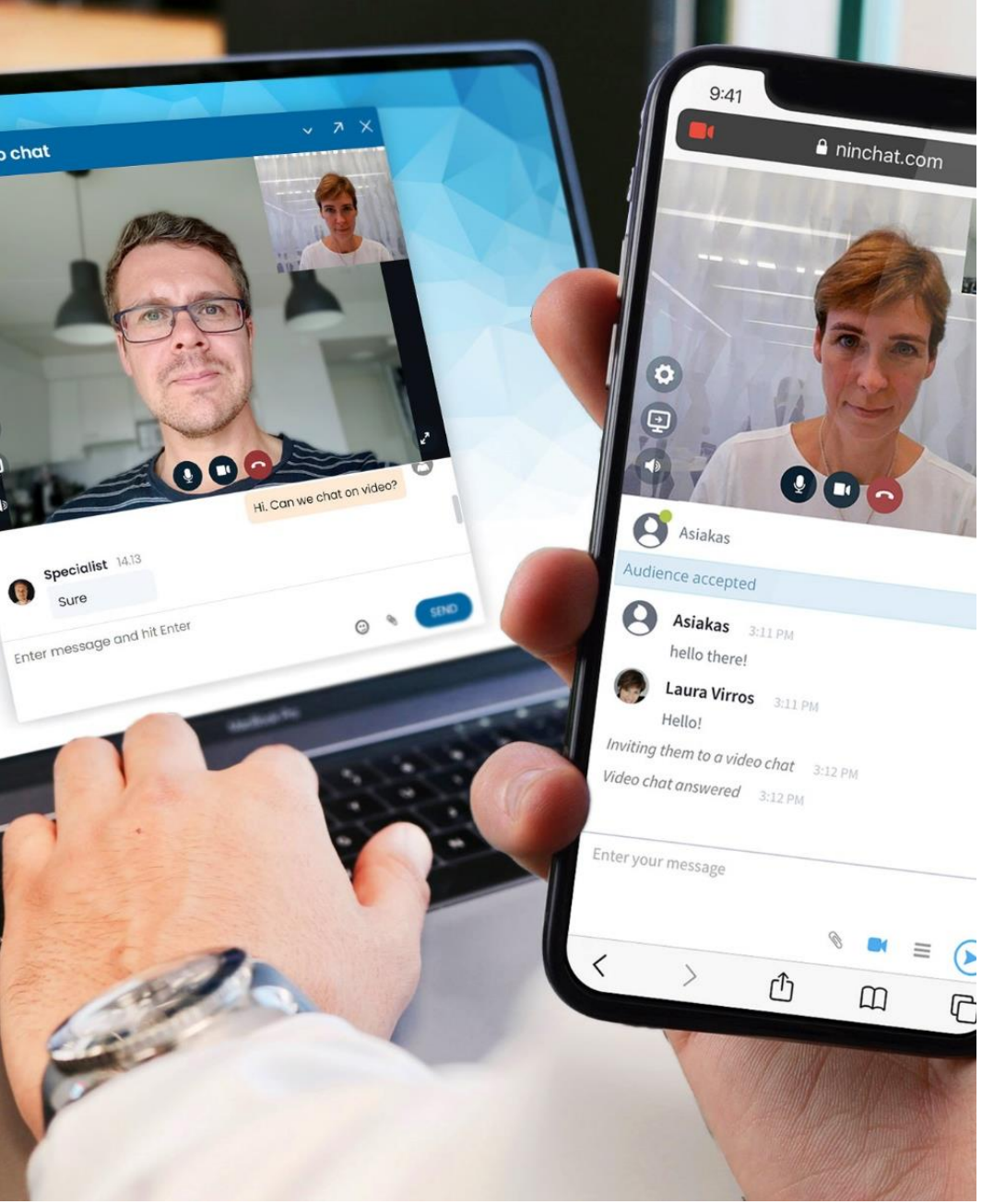
BUSINESS FINLAND

medixine



DOCTORS JOIN THE BIT SPACE WITH NINCHAT

OUR SOLUTION

Ninchat's chat, bot and video messaging solution is a secure and powerful tool for providing remote consultations in public and private healthcare as well as in associations. Healthcare organizations use Ninchat mainly for chat and video patient consultations, but also for team communication and for live groups. Ninchat is integrated into the healthcare provider's care processes. The service is offered in the client brand's look and feel.

UNIQUENESS AND IMPACT

The Ninchat chat, bot and video messaging and remote consultation solution can be tailored to provide bot-assisted general information. It also collects background information and connects the customer to on-duty professionals, if needed. Ninchat enables new operational models, cost savings and efficiency by giving patients better access to care. It decreases the need for physical travel and optimizes and shortens the provider's operational processes.

COMPANY

Ninchat enables future healthcare by providing customizable secure chat, video consultations, an automation bot and an alert tool for healthcare service providers.

REFERENCES

Ninchat is widely used in the hospital districts around Finland.

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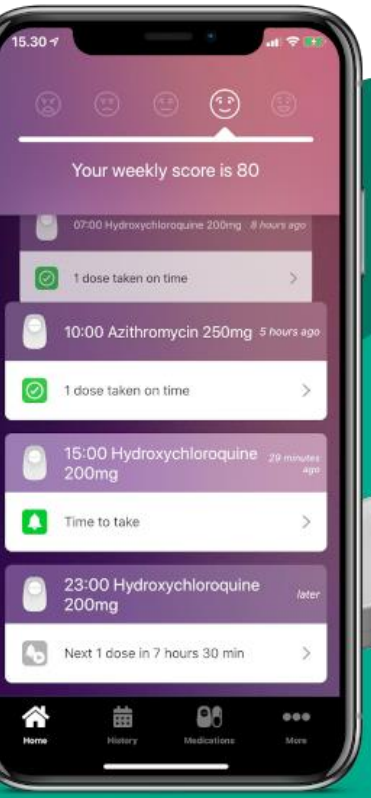
NINCHAT

BUSINESS FINLAND



IMPROVE MEDICATION ADHERENCE, GAIN DATA

OUR SOLUTION

Popit's adherence and patient engagement platform comprises a patented sensor device, a medically certified app and a cloud. The solution has been developed together with healthcare professionals; it has been validated to reduce missed pills by over 80%. Patients download the app and attach the Popit Sense device onto the blister pack. When the patient takes a medication, the device detects it automatically. Patients receive a reminder only if they miss their dose. The app also contains helpful features, like the content of the therapy or drug. Medication-taking data is sent to our server in an unidentifiable format in real time. The server is also responsible for sending out support messages based on the stage of the treatment journey.

UNIQUENESS AND IMPACT

Our solution's impact has been validated in studies and in real life. For anyone with a regular medication regimen, this is an ideal solution to stay on track with their treatment worry-free. The clip-on device does not require changes to medication packaging, enabling fast deployment to patients. Insights on adherence data bring opportunities for developing new/improved patient-centric services and solutions. When patients take medications as recommended, we see less medical waste, better treatment outcomes and lower healthcare expenditures.

COMPANY

Popit is a pioneer in improving patient adherence through smart consumer devices. We're dedicated to improving adherence by making medication connected. Popit is located in Espoo, Finland.

REFERENCES

Kuopio University Hospital study, Finland.

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BUSINESS FINLAND

popit

VIRTUAL HOME CARE FOR THE ELDERLY

OUR SOLUTION

Virtual Home Care is especially designed for elderly and vulnerable people at home who need help with daily treatment and oversight that can be carried out digitally. We offer high quality, secure and reliable video connection between the care receiver, caregiver and the family members.

UNIQUENESS AND IMPACT

In addition to virtual home care's ability to improve wellbeing of aging people, it offers faster access and clear cost savings by enabling more care visits by caregivers to the elderly. Virtual care is also more environmentally friendly when some physical visits can be replaced by virtual visits. Over the years VideoVisit has become a ground element of digitizing Finnish home care services. As a result today 200+ municipalities and 6000 home care clients rely on VideoVisit.

COMPANY

VideoVisit is the market leader in Finland offering SaaS based cloud services for virtual home care visits. We provide a complete digital healthcare platform to outpatient care, which enables healthcare service providers to offer various sorts of remote rehabilitation, care services and online doctor consultations.

REFERENCES

In Finland we hold a national framework agreement for Virtual Care services with +1M seniors using the service daily. Key customers include for example cities of Helsinki, Espoo, Tampere, Oulu and Turku among others.

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BUSINESS FINLAND

VIDEO VISIT

AN INNOVATIVE MOBILE CONCEPT

OUR SOLUTION

VitalSignum's Beat2Phone ECG is a simple, reliable and easy to use medical grade wearable electrocardiogram (ECG) sensor with a phone application connected to a cloud analytics service. It provides fast, cost-effective screening of heart problems and detection of atrial fibrillation (AF). The system has been designed to be maximally automated to save health professionals' valuable time and effort. Beat2Phone ECG enables better preventive monitoring and observation of cardiac symptoms. This leads to cost and time savings in healthcare and a healthier life for patients. Beat2Phone ECG is a Class IIa CE-marked medical device (CE0598).

UNIQUENESS AND IMPACT

Beat2Phone ECG is an ideal tool for healthcare professionals, such as physicians and home care professionals. Beat2Phone ECG monitoring can occur at home before and after operations. People do not have to go to the hospital just to get their heart monitored. With Beat2Phone ECG, data can be transferred from the patient's home to the healthcare professional.

COMPANY

VitalSignum is based in Finland and was founded by top medical and health technology experts. It develops and provides simple, reliable and easy-to-use mobile health monitoring solutions and services.

REFERENCES

Helsinki University Hospital and Turku University Hospital, Finland.

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BUSINESS FINLAND

VITAL SIGNUM

NEXT-GENERATION CARE FOR MOVEMENT DISORDERS

OUR SOLUTION

Adamant Health has developed a unique method of reading a patient's neuromuscular signals with a wearable electromyography (EMG) sensor. When combined with advanced algorithms, it is possible to detect a patient's symptoms with at-home measurements over several days. Movement disorders like Parkinson's disease are affecting more and more people and burdening the healthcare system. Until now, it has not been possible to get high-quality data on patients' symptoms in their everyday life. Therefore, treatment has been largely based on observations during an appointment or in the hospital. Adamant Health provides uniquely detailed and accurate long-term insights into patient symptoms for physicians' treatment planning and optimization.

UNIQUENESS AND IMPACT

Adamant Health Analysis Service provides uniquely accurate insights into patient symptoms. It is able to differentiate between visually similar symptoms often confused by the patient and even by professionals.

The method detects symptoms not yet physically visible and separates symptoms from voluntary movements.

Home measurement is more convenient for the patient. It also reduces the need for ward space and hospital resources. Remote appointments reduce the need for travel and alleviate the shortage of specialists.

COMPANY

Adamant Health is a research-based spinoff from the University of Eastern Finland focusing on the measurement and analysis of movement disorders. Our technology is CE marked.

REFERENCES

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ADAMANT HEALTH

BUSINESS FINLAND

ARRHYTHMIA DETECTION WITH LATEST TECHNOLOGY

OUR SOLUTION

PulseOn Arrhythmia Monitor system is designed in collaboration with cardiologists to help diagnose, screen for and monitor cardiac arrhythmias, especially atrial fibrillation. The collection of patient data is based on continuous photoplethysmography (PPG) and intermittent electrocardiography (ECG) technologies. When an arrhythmia is noticed, the wrist device notifies the patient to take an ECG by placing the other hand on the device. The measurement data is sent to a cloud service, where the algorithms convert the data into an easier-to-read format, which speeds up diagnosis. PulseOn Arrhythmia Monitor System is CE certified as a medical device according to EU Medical Device Regulation.

UNIQUENESS AND IMPACT

The solution enables long-term continuous cardiac monitoring regardless of the location of the patient or physician. The wrist device is economical and reusable. It is easy to clean and can be reused by patients for 5 years. Due to energy efficiency its battery lasts at least a week without recharging.

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The wrist device is designed to be easy to use and comfortable for the patient, so the measurement does not affect the quality of life. The device has high accuracy (sensitivity and specificity) in the detection of atrial fibrillation. It also detects symptomless arrhythmias.

COMPANY

PulseOn is a pioneer in optical heart rate technology (OHR) and a high-tech company specializing in arrhythmia detection equipment and analysis software for professional medical use.

REFERENCES

Clinical investigations performed at Tampere Sydänsairaala, Finland.

BUSINESS FINLAND

PULSE ON

BUSINESS
FINLAND

Euroopan unionin rahoittama –
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