

Nordic Digital Health Solutions

COVID-19



Nordic
Innovation

Nordic Innovation

With the Health, Demography and Quality of Life program, we connect people, data and innovation for a better life – and help make the Nordics the most sustainable and integrated health region in the world, providing the best possible personalised healthcare for all its citizens.

For more information please visit: nordicinnovation.org/health

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EXAMPLES OF NORDIC SOLUTIONS THAT ARE TACKLING COVID-19

Ever since the global community received information about the onset of the COVID-19 virus, Nordic companies have tirelessly been developing innovative solutions to address threats and challenges posed by this new unwelcomed enemy.

Sometimes crises of this nature also bring forward new innovative solutions. A myriad of new digital solutions have been created in the Nordics that address the trials and tribulations posed by this virus, and some of them are already being used with great positive effects.

At Nordic Innovation, we see it as our responsibility to share the knowledge of these solutions in our region and globally. With this in mind, we have created this digital catalogue showcasing some of the latest ready-to-use innovative solutions from Nordic companies that all can be utilised in the battle against COVID-19.

We hope this initiative will serve as a way to share knowledge and as an inspiration for Nordic collaboration.

By connecting people, data and innovation, we truly believe people can enjoy a greater quality of life!

Rasmus Malmberg and Thordur Reynisson

Senior innovation advisers at Nordic Innovation

Responsible for the Health, Demography and Quality of Life program.

ADDI Medical



HOPE solution makes communication easier through home-based monitoring and remote feedback.

COVID-19 has increased many people's interactions with health-care professionals (HCPs), and ADDI Medical's HOPE solution allows for better decision support. Information is collected via activities, devices, smart e-forms – including complicated algorithms – and factors for automation actions and communication.

Configured to the needs of COVID-19 and rebranded as HOPE Corona, the solution allows HCPs to create, store and provide the patient care plan via HOPE Practitioner (a web application) and provide it to patients via the user-friendly, flexible and safe HOPE App (iOS and Android).

Activities in a plan are pushed to patients' phones and/or tablets so they know what to do and when – they will even automatically receive a reminder if they miss one of the activities. HOPE Corona is already integrated to Apple HealthKit

and Google Fit so that spirometry, blood pressure, heart rate and more are automatically sent to the solution, informing HCPs via HOPE Practitioner of progress and allowing them to factor these elements into future activity plans.

Patient-generated information can also be directly communicated to academia to use for research, although HOPE Corona comes with strict information sharing protocols. This means that the individuals have the final say on whether they allow their information to be used or not.

Benefits

- Information-driven platform
- User-friendly, flexible and safe
- Algorithms, prediction and machine learning
- Web-, iOS- and Android-based solution
- Full compliance with GDPR and PDL legislation

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"With HOPE Corona, healthcare staff initiate and quality assure the distance activities that the patients themselves carry out."

Nina Sellberg
CEO, ADDI Medical

Dossier Healthcare



The science around COVID-19 is constantly evolving, so clinical staff need to remain well-trained and informed of the current best practices, something that Dossier has been providing for the healthcare sector for the past two decades.

Dossier specialises in getting new staff up to speed with the latest developments of the coronavirus, as well as the reallocation of clinical staff to departments that are seeing peaks in demand - especially ICU and temporary facilities during the pandemic.

Training is tailored to match the specific need, with requirements given to new employees as soon as they are identified. Learning then takes place at home on personal devices and in-person, with on-the-job preceptor sessions and assessments taking place.

Since establishing its presence in Norway in 2000, Dossier is now active in Denmark, Germany and the USA. This demonstrates the flexibility to adapt to different national health systems, meaning that it can be rolled out to any country that requires training, during the pandemic and afterwards.

Benefits

- Training solution keeps clinicians up to date
- Provides speedy up-skilling
- Materials available on personal devices
- Multi-national presence
- Offers integrations through APIs

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"Departments had paper lists or used Excel for registration of employees' competency and education. This platform has given our leaders a better view of and control over competency development."

Anne Mette Koch
Special advisor
Haukeland University Hospital



HealthFOX



Staying at home is one of the key messages during the coronavirus pandemic, and HealthFOX helps people to do that, while still being able to communicate with healthcare professionals.

The COVID-19 CARE solution has patients fill out a questionnaire, then guides them to the correct care and documents the healthy eating, physical and mental exercises required once in rehabilitation.

It also reports on the progress of outpatient care to the hospital where healthcare workers can follow the progress remotely, and it's been proven to work, with sick leaves being reduced by up to 50%.

The patient will never be alone with the care, as the healthcare professionals are always

available via the application's chat or online video functions to provide needed information to survive from the infection and rehabilitation.

Healthcare professionals have their own browser-based dashboard for communication and creating holistic self-care programs for their patients, that they send to their devices. They will be able to continue this once the pandemic is over, as the app comes with developer tools to create new care pathways with the latest relevant information.

Benefits

- Helps stop the spread by keeping people at home
- Healthcare professionals can monitor recovery remotely
- Offers chat and online video options
- Cuts direct costs by up to 30%
- Can be applied to other diseases

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"HealthFOX digital system changes the way doctors and healthcare professionals interact with their patients, providing them with constant support and timely feedback without delaying the waiting time."

Kimmo Korhonen
CEO, HealthFOX

HEALTHFOX
COVID-19 CARE

Kara Connect



Kara Connect brings professionals and their clients together digitally at a time when social distancing is necessary.

The plug-in-and-play platform provides a secure workstation for health, welfare and special education services, whether they be individual professionals or larger service operators.

The solution opens up a wider variety of support than people or organisations may otherwise have access to, such as child and adult speech therapy, and professional mental help services. It can also prove to be a vital tool for supporting people that are isolated geographically or mentally.

Kara Connect comes with everything a professional could need, including secure client invites, waiting lists, note-taking facilities and online peer-to-peer video. It also provides a chat module, finance and payment options and a consent system for GDPR.

A professional can start setting up their services and products

– including creating a client profile, with associated GDPR consent – in about 15 minutes, and start sending out meeting invites – all done securely from a single workstation.

Kara Connect is currently in use at Odense Kommune and multiple professional practices in Denmark, plus many Icelandic institutions, including Landspítali University Hospital and the social and school services in Reykjavik City.

"COVID-19 will change workflows and service mindsets for many, but the biggest change will be in healthcare and welfare. We are here to help these forward-thinking professionals and their clients while taking these important steps of change."

Thorbjorg Helga Vigfusdottir
CEO, Kara Connect

Benefits

- Provides a secure platform for health and welfare professionals
- Connects remote areas
- Designed for security and accessibility
- Quick setup time
- Fully GDPR-compliant

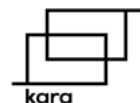
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Medanets



The COVID-19 pandemic has highlighted the importance of maintaining hygiene and the time pressures that exist on nursing staff. Medanets takes both of these factors into account to provide a vital tool for healthcare professionals contending with the virus.

The Medanets mobile solution allows nurses to make observations and input them into the electronic health record (EHR) in real time. This saves time compared to making notes with pen and paper to be inputted later – it also reduces the infection risk that using these analogue methods can result in.

By updating the EHR in real time, all staff know individuals' conditions as they are at that moment, rather than what they were when vitals were last taken. This is crucial with such a fast-acting virus such as COVID-19, as it allows healthcare professionals to identify deterioration more quickly and make speedier interventions.

Medanets is already integrated with major EHRs in the Nordics, with two global platforms on the way. The solution is fully customisable and easy to configure, so workflows for other conditions besides COVID-19 can also be taken into account.

"With the Medanets app, a healthcare professional can retrieve patient EHR data, manage bedside documentation and access evidence-based practice via a mobile device. The solution enables safe, effective and more hygienic information flow. Customers can save up to 120 hours per ward, per month, which means more time for actual care."

Juha-Matti Ranta
CEO, Medanets

Benefits

- Updates patient data in real time
- Reduces input errors by 75%
- Saves 120 hours of nursing time per month
- Fully customisable
- Mobile app compatible for iOS and Android

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medanets
DIGITAL CARE & HUMAN TOUCH

O2matic



The primary problem that COVID-19 causes is lung failure, due to inflammation of the lungs' interstitial tissues and fluid retention in the alveoli. In turn, this reduces oxygenation of the blood, which is where O2matic provides an automated solution.

Typically, staff monitor oxygen levels manually, but two international studies showed that they are only able to ensure levels are correct less than half of the time. With O2matic, this number jumps to 85%, as saturation of the patient's blood is monitored every second and adjusted accordingly.

As well as improving the patient experience, the system alleviates pressure on healthcare staff by reducing the amount of checks they need to do. This has the side benefit of reducing the chances of clinicians spreading

infections as they move from patient to patient. O2matic is already being utilised in more than ten hospitals in Denmark, as well as 13 other countries, including Italy, which has seen high levels of COVID-19 patients. Additionally, four more nations are working on introducing O2matic to treat people who have the virus.

Training on the system can be done remotely in around an hour, and following the pandemic, it can be used to treat patients with other respiratory conditions, such as COPD and asthma.

Benefits

- Monitors blood oxygenation in real time
- Helps reduce infection risks
- Individually configurable alarms
- Can be used to treat other respiratory patients
- Complies with WHO recommendations for COVID-19 treatment

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"For treating COVID-19 and other respiratory conditions such as COPD, O2matic makes oxygen titration safe and simple."

Farzad Saber
CPO, O2matic

O₂matic

Optilogg



OPTILOGG® from CareLigo AB supports chronically ill older people with their self-care, allowing them to stay in their homes more and relieving pressure on healthcare professionals.

The standalone device monitors symptoms and informs the patient of the results so they can self-medicate effectively, keeping them healthy.

Controlled clinical trials show that OPTILOGG reduces in-hospital care by 38%, improves event-free survival by 50%, increases quality of life by 34% and encourages better self-care behaviour.

By keeping chronically ill people away from emergency units or waiting rooms, it also reduces their chance of catching COVID-19. Additionally, it frees up healthcare professionals (HCPs), intensive care capacity and ventilators to deal with people requiring assistance with the virus.

If the self-caring patient needs help, the system will inform them to contact

a clinician, and can even alert the HCP if absolutely necessary. OPTILOGG can also be configured to connect to remote monitoring systems, video links or other bio sensors if required.

OPTILOGG has full scalability, with evaluations in over half of Sweden's regions/counties, as well as one in Finland. CareLigo provides full on-site tech support too, so that HCPs do not have to act as technicians for the device.

"With the only clinically proven solution on the market, we empower the patient to better self-care, better health and reduced hospitalisation, which today with COVID-19 is more important than ever!"

Fredrik Westman,
CEO, CareLigo

Benefits

- Promotes self-care
- Proven to reduce hospital visits
- Keeps older people away from virus hotspots
- Reduces pressure on healthcare workers
- Frees up hospital beds and equipment

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Sani nudge



Hand hygiene has become a key concern for populations worldwide as people seek to reduce their chances of contracting COVID-19, but its necessity is all the more vital when taken into a hospital or care home environment.

Sani nudge tracks when healthcare workers are in situations that require hand hygiene and marks them compliant when they have been seen to use soap and sanitiser at the right time and in the right place. It does this by generating location and movement data collected through hardware installed in the facility and in caregivers' ID badges.

This allows hospitals and care homes to see which rooms healthcare workers go into, who they interact with, when

they perform rounds and more. At a time when facilities are experiencing an unprecedented and unpredictable flow of patients, it can prove vital in breaking the chain of infections by knowing who met who and when.

Sani nudge has been proven to be effective – its actionable insights have been shown to improve hand hygiene by 200-300%, reduce infections by 29-64% and decrease short-term sick leave amongst staff by 72%.

Benefits

- Proven to boost hand hygiene levels
- Breaks the chain of infection
- Provides actionable insights to improve processes
- Able to maintain best practices post-pandemic
- Installed in nine different hospitals across Scandinavia

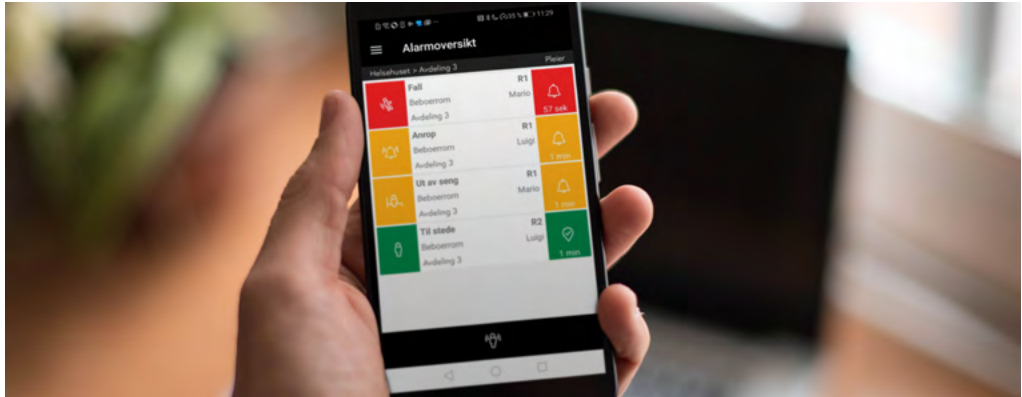
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"On a normal day in a hospital, there's an average of 100 hand hygiene opportunities in each room – multiply that across a facility, and that's a lot of opportunities for COVID-19 to spread. By tracking staff movement, Sani nudge can help them to maintain their hygiene levels and protect both themselves and their patients from infection."

Theis Jensen,
CEO, Sani nudge





At the best of times, clinical staff often wish they could be in multiple places at the same time to care for patients, and that is even more true during a period of pandemic.

Fortunately, Sensio Videotilsyn is able to provide that kind of ability by providing oversight across many patients at the same time. Using the system means that all rooms in a hospital department can be fitted with audio and/or video monitoring equipment. This provides efficient and simple supervision for staff, who can check on patients through a pre-configured tablet.

The system allows patient involvement too, with the Safemate mobile security alarm allowing them to actively call for help, if required. Staff and patients alike can also use the Mobile Watch Room app on their devices, which allows for two-way conversation without the risk of infection being spread by meeting in person.

The privacy of the patients is kept at a paramount throughout, with limited access to Sensio Videotilsyn via the local network. There is also no storage of video or personal information, while having access on their mobile devices doesn't restrict healthcare workers' use of other apps, such as access to the EHR.

"Patients and healthcare workers alike cherish interaction with each other, but resource constraints mean that this isn't always possible – particularly at a time like this. Sensio Videotilsyn not only allows monitoring from a safety standpoint but can also help to maintain that verbal communication through individuals' devices."

Petter Siqveland
Sales and business dev. partner
Sensio

Benefits

- Monitor patients in real time
- Allows two-way communication
- Patients are able to actively call for assistance
- Privacy is key, with no storage of video or information
- Available for hospital and care home use

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Sidekick Health



Pressure on healthcare systems is peaking around the world due to the COVID-19 pandemic, and Sidekick Health has been commissioned to reduce some of the strain in Iceland with its nationwide COVID-19 solution.

Using the platform, patients self-report on a panel of symptoms and measurements at multiple times through the day. Artificial intelligence then categorises cases by severity, allowing healthcare professionals to monitor and manage a large number of patients and tend to the most acute cases first.

"I feel like everything I've been doing over the past 20 years, from engineering, to medicine, public health and then spending six years building and validating this platform with my colleagues, has prepared me to be able to help at this point. I am very thankful to see our platform helping people through this difficult crisis."

Tryggvi Thorgeirsson
CEO, Sidekick Health

The COVID-19 solution is rooted in Sidekick's multi-area therapeutic platform, which has been proven in clinical studies to help manage weight control, medication adherence and psychological health.

The version for the coronavirus was co-developed with nine highly experienced infectious disease experts and is being tested using a cohort of hundreds of patients. Sidekick's patient-centric solution has been scaled across Iceland and can be spread across multiple geographies. It allows for localised content to be shared by clinical teams so that patients can educate themselves and manage their health. Localising the solution can be done in approximately two weeks.

Benefits

- Triages patients in their own homes
- Supports healthcare professionals through AI
- Offers highly scalable platform
- Pushes relevant information to patients
- Provides solution for multiple diseases

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