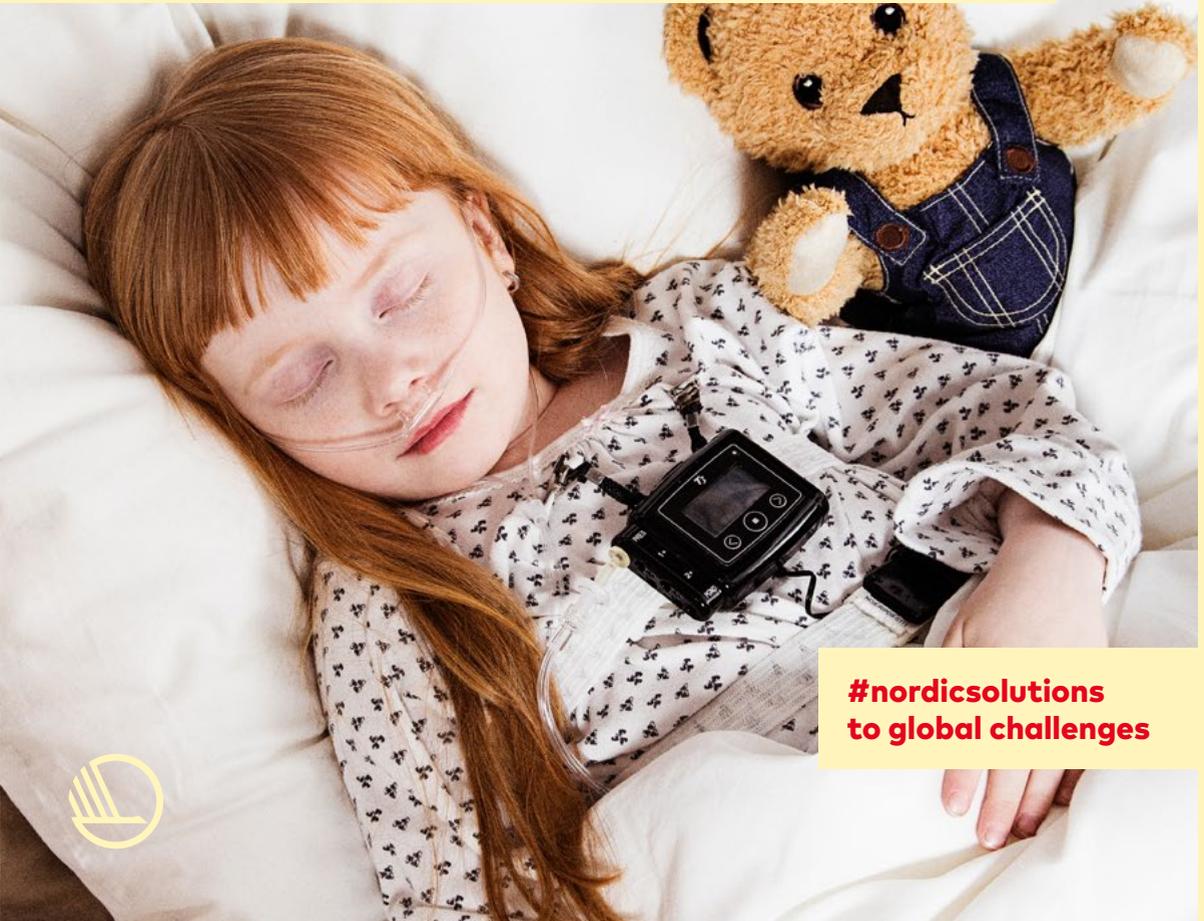




Nordic Health Tech – Core Qualities and Strongholds



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to global challenges**



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- Core Qualities and Strongholds

The contents of this booklet are based
Nordic Health Tech Ecosystem – Core
Qualities and Strongholds report

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***"The Nordic region offers
an attractive health
ecosystem for the export
of health solutions."***

Joint Nordic strength in healthcare

This booklet gives you an insight into core qualities and strongholds in the Nordic health tech ecosystem. The booklet is produced by the project Nordic Welfare Solutions, a part of the Nordic prime ministers' initiative Nordic Solutions to Global Challenges that runs through 2017-19. The programme aims both to boost the export of Nordic health tech solutions and to encourage companies to come to the Nordic region to test and develop their health solutions.

For more information visit
www.nordicinnovation.org/welfaresolutions

1

Core Qualities

The Nordic model is like a bumble bee

The Nordic model, with its comprehensive welfare state, has at times been compared to a bumble bee. Theoretically the bumble bee should not be able to fly, but it does so regardless of the laws of physics.

Despite this comparison the Nordic health care systems are globally known for their performance: Providing efficient (in cost-benefit terms) and high-quality healthcare to the entire population.



Healthcare system characterized by high quality and knowledge

The Nordic countries are well-developed democracies with relatively small economic differences. The core qualities of the region are an important reason for why the healthcare systems are both of high quality and regarded as equitable, in an international perspective.

" The entire population get access to all necessary healthcare services and pharmaceuticals regardless of geographic location or personal income."

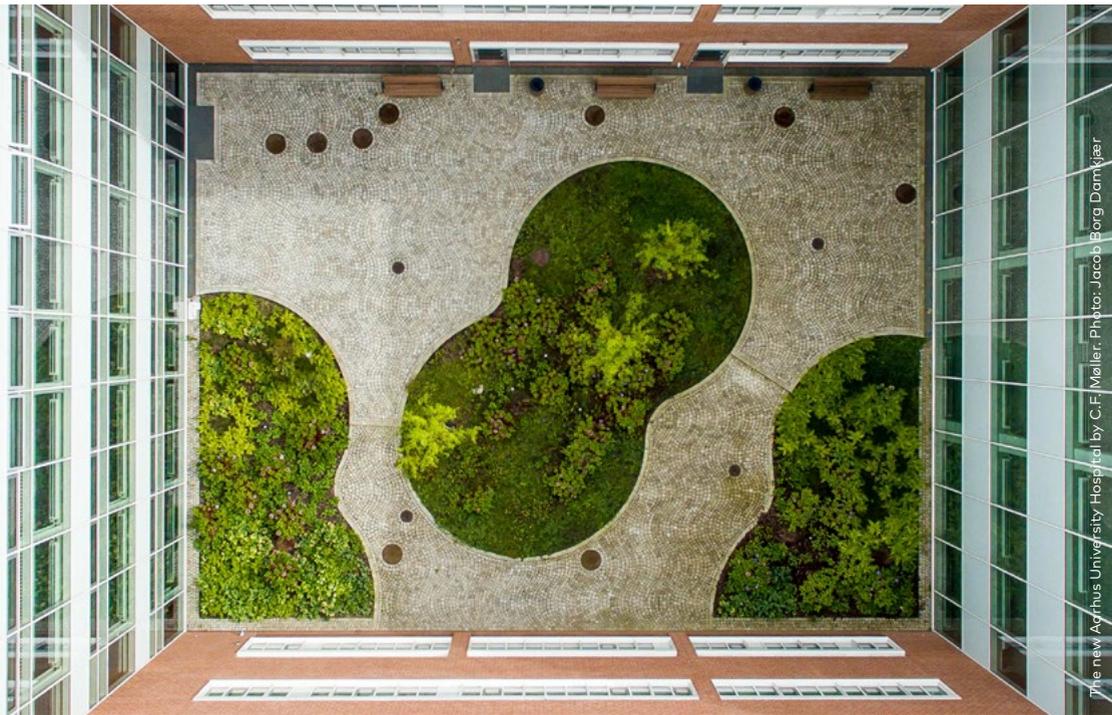
Equitable healthcare to all citizens

All the Nordic countries have universal public healthcare systems that are primarily tax-financed.

The level of the user fees or co-payments is regulated at the government level, either nationally or regionally, and does generally contain some sort of maximum personal cost ceiling for the individual over a certain period (e.g. 12 months). If not, schemes are implemented in such a way that citizens lower on the income and wealth distribution scale get access to all necessary healthcare services and pharmaceuticals regardless of personal income.



The new Aarhus University Hospital by C.F. Møller. Photo: Kristine Mengel



The new Aarhus University Hospital by C.F. Møller. Photo: Jacob Berg Damkjær

Sustainable healthcare

The term *sustainable healthcare* comprises several features within healthcare and hospitals, energy efficiency, corporate social responsibility and environmentally friendly production of pharmaceuticals being some examples.

The Nordic countries are general regarded as the "greenest" countries in the world, dominating indexes such as the Environmental Performance Index as well as the Global Green Economy Index.

Smart digital and mobile healthcare solutions

The feature of the Nordic countries of being early adopters of new technology is not unique to the healthcare sector. In fact, all the Nordic countries are ranked within the top 20 in the world, and score particularly highly in *Integration of Digital Technology and Use of Internet* (World Economic Forum's surveys in 2015 and 2016).

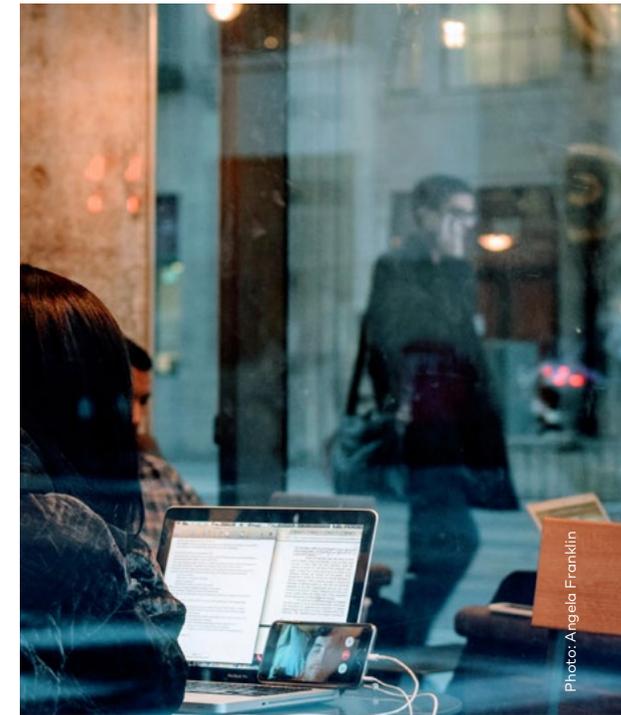


Photo: Angela Franklin

"Nordic countries are ranked at the very top with regards to digitalisation compared to EU-cuntries."

Early adopters of new treatments and technology

The fact that the populations in the Nordic countries are early adopters of new technology, expect high quality healthcare and in general have high labor costs makes investments in new technology and solutions profitable. Hence, the Nordic region has a number of prerequisites that should favorize the region for pilot-testing and early introduction of such products and services.



The Nordic model

The Nordic model is based on openness and citizen/patient involvement. Transparency in healthcare improves the citizens' trust in the system and reinforces the social contract of tax financing in universal healthcare models such as those established in the Nordics.

Further, research shows that transparency in health data and publications leads to improvements in the quality of healthcare and gives improved health outcomes.



Benefits from mutual citizen and institutional trust, as well as flat structures

International comparisons of the perceptions among employers and employees with regards to both how efficiently talent is preserved and nurtured and willingness to delegate authority indicates that a high level of trust in Nordic societies and the flat structure/hierarchy foster efficiency.

The high level of trust is likely an important reason for the well-functioning and -performing healthcare systems in the Nordic countries.

Unique availability of high quality data

All the Nordic countries have a long tradition of collecting registry-based population data in general, and in particular for healthcare purposes. The implementation of unique personal identifiers, established as early in the 1960s, enables linkages across a range of registers.

"High quality registry data can be used to tailor medicine and treatment to individuals."



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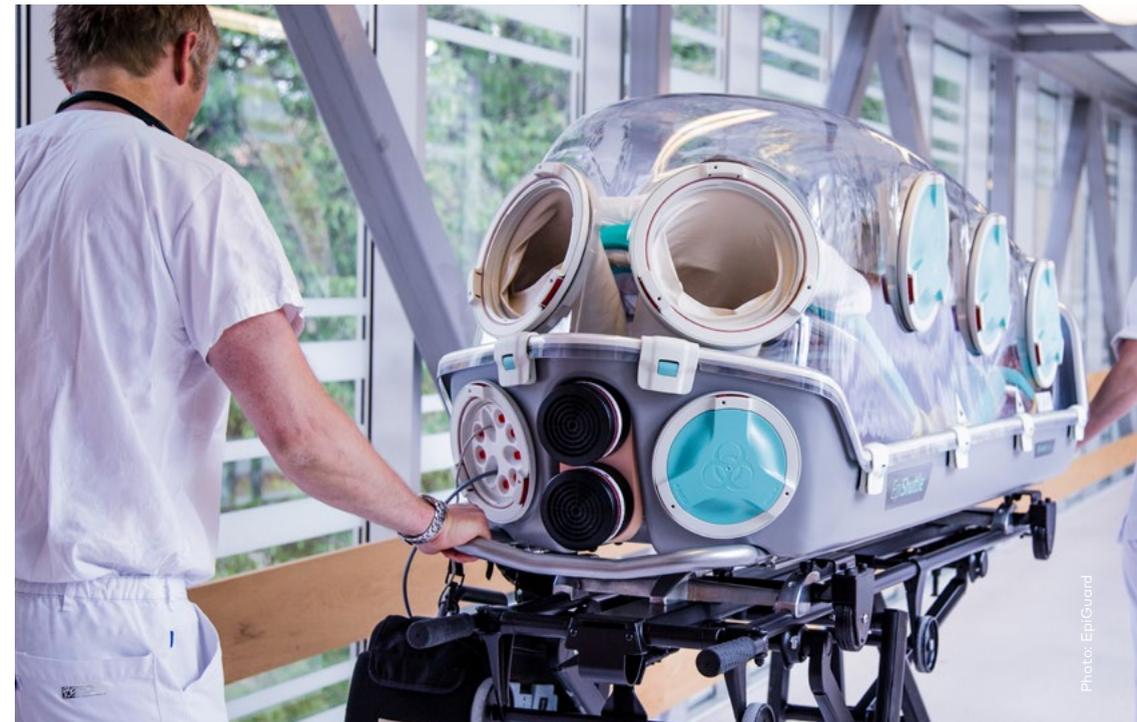
Strongholds

Four Nordic Strongholds

A stronghold is defined as an area where we possess the necessary knowhow and knowledge, innovative solutions and a Nordic ecosystem comprising relevant institutions, enterprises, universities, cluster organisations that can support the internationalisation of Nordic health and welfare solutions.

A strong business community and potential, and a certain Nordic balance, is required for an area to be a Nordic stronghold. The four Nordic strongholds are:

- **Sustainable hospitals**
- **Welfare technology**
- **Personalised care**
- **Smart digital solutions**



Sustainable hospitals

Hospitals in the Nordic countries as well as in other regions of the world need to meet challenges considering the environmental impact modern hospitals have, but also the need for more efficient hospital care with a rapidly increasing elderly population.

Though there are country-specific characteristics in the Nordics, but with regards to strengths within the sector of sustainable healthcare and hospitals, the Nordic countries seem to share the focus on environmentally friendly hospitals.



Welfare technology

The Nordic region has a strong revealed comparative advantage within digital health solutions and welfare technology. The reasons for this are cultural, economic and demographic characteristics of the region, which in turn facilitates the continuation of welfare technology as a stronghold for the Nordic region in the future.

The Nordic region has a home-based elderly and disabled care model which gives rise to innovations in self-care solutions.

Personalised care

Big data and personalised care is a research area where the Nordic countries have an advantage over other regions in the world. The Nordic region has collected high quality registry data over many decades and has close to an unrivalled position in this field.

New solutions for personalised medicine and care enable health-care providers to give the right care, with the right dosage at the right time.

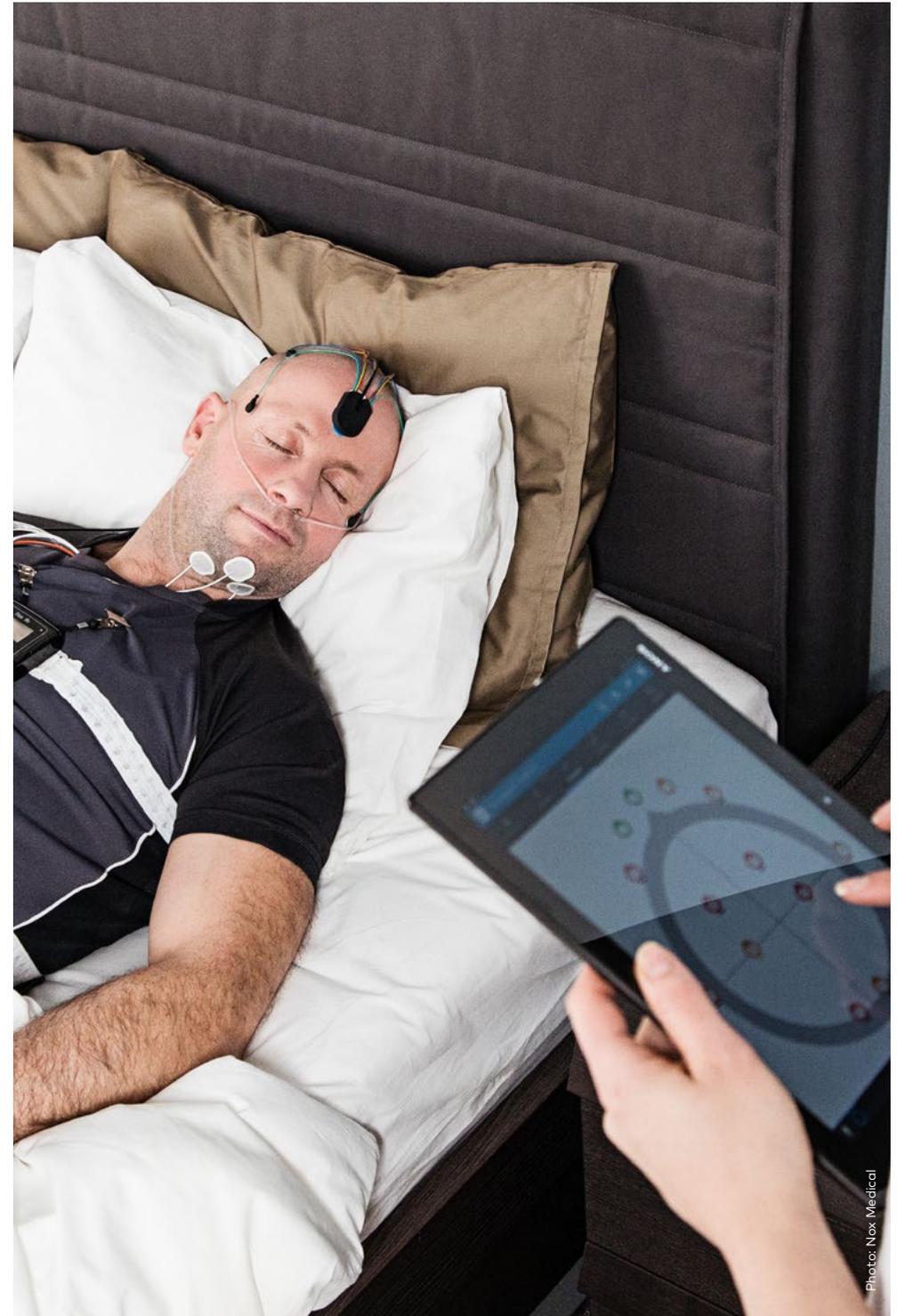


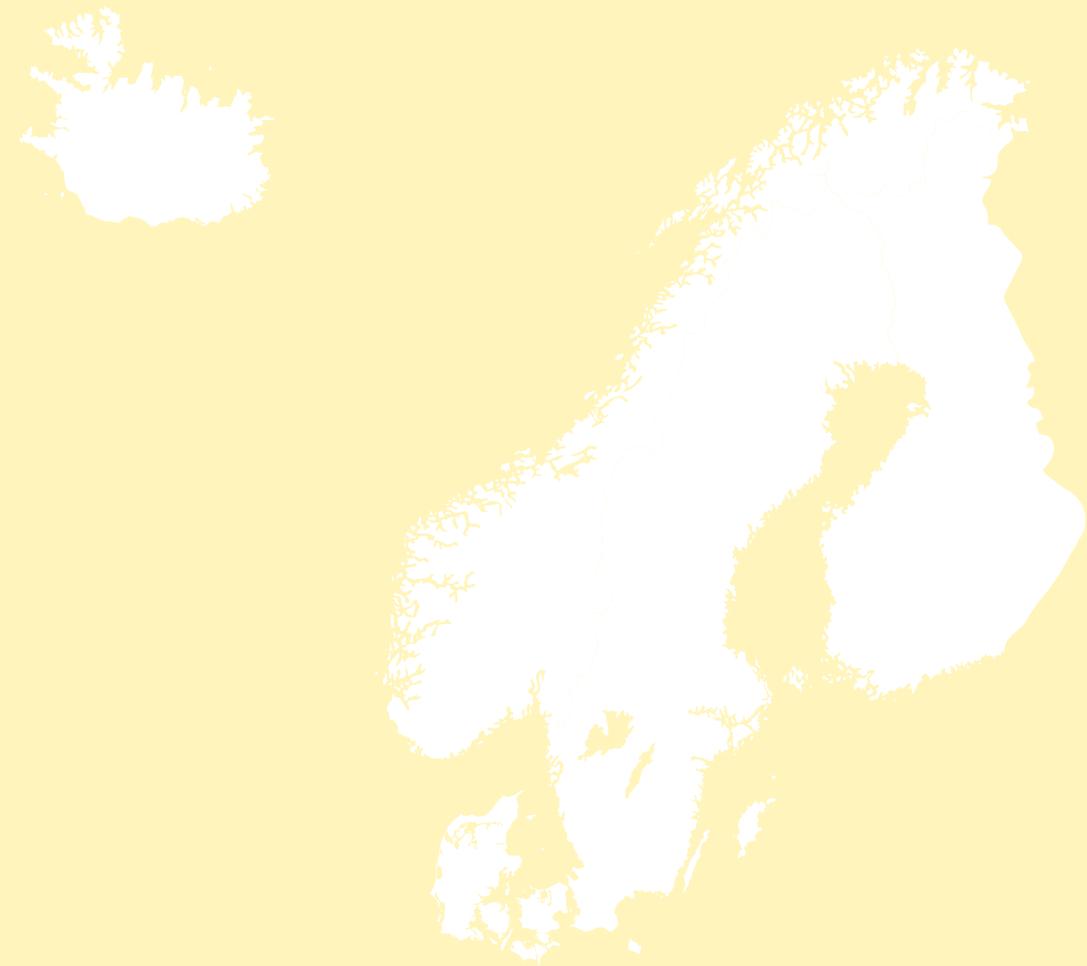
Smart digital solutions

The Nordic region has a long history of world-leading companies within electronic communication and solutions. The NMT standard, Ericsson and Nokia are part of the reason for the early and successful Nordic business development within mobile technology.

The digital infrastructure and technical knowledge in the population makes the region an ideal region to develop, test and implement new digital solutions within healthcare.

"The Nordic region has a strong position when it comes to smart digital solutions within healthcare."



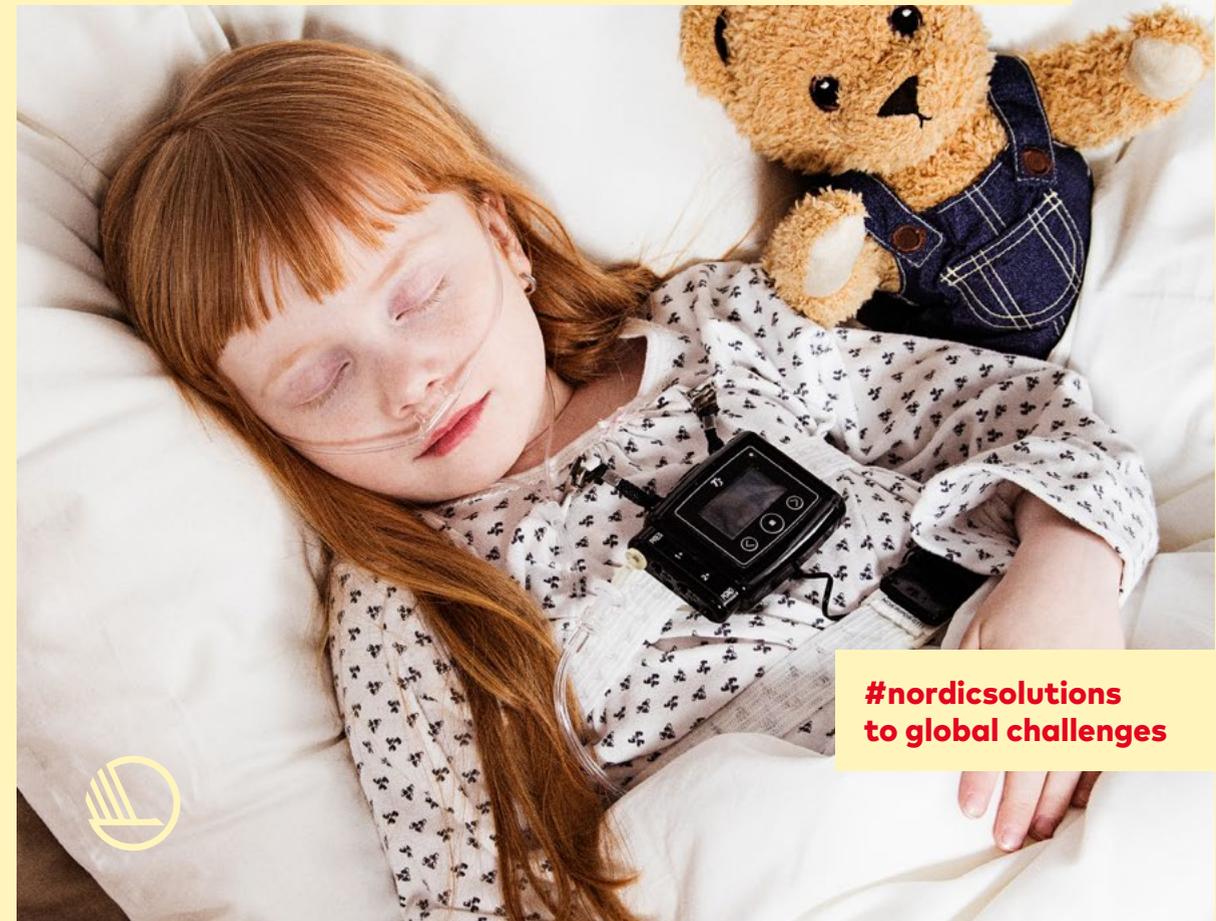


On behalf of Nordic Innovation, Menon Economics has conducted an analysis of joint Nordic strengths in healthcare.

The overall aim of the project has been to create a knowledge base that can inform a strategy for a joint export promotion effort and internationalisation of Nordic healthcare companies, and to encourage companies to come to the Nordic region to test and develop their health solutions.



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