

A woman with blonde hair, wearing a light blue lab coat, is shown in profile, looking intently at a blue, semi-transparent anatomical model of a human head and neck. She is holding the model with both hands. The model shows internal structures like the brain, sinuses, and spine. In the background, there is a large medical monitor displaying a grid and some faint diagrams. The scene is set in a laboratory or medical office with various pieces of equipment visible. The overall lighting is soft and professional.

# *Nordic Welfare Solutions*

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# ***Nordic Innovation – our mission:***

*To contribute to sustainable growth,  
increased entrepreneurship, innovation and  
competitiveness in the Nordic region.*

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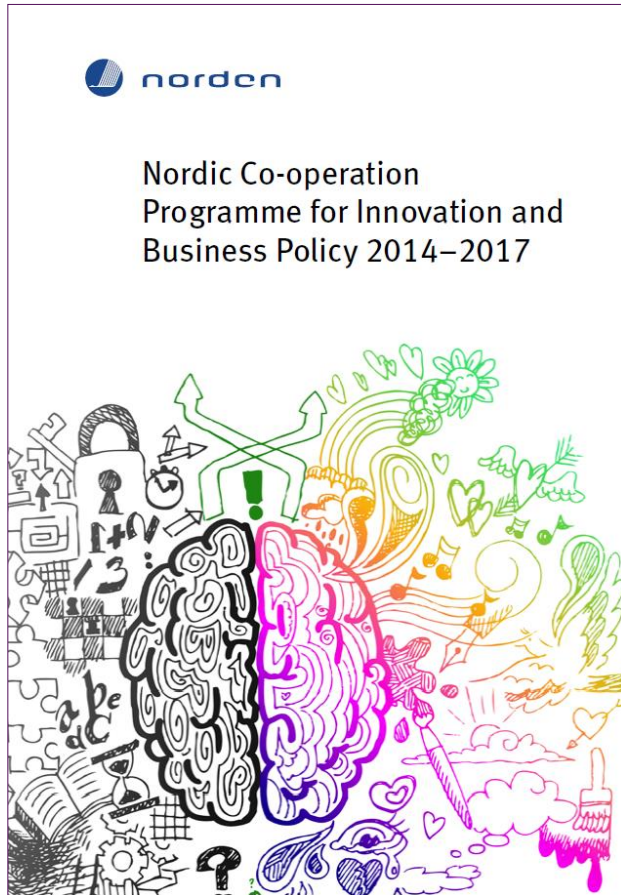
# *Nordic value*

## *– for businesses and society*

- Sharing of best practice
- Nordic "standards" / solutions
- Nordic home market (larger + reference)
- Nordic infrastructure for entrepreneurs
- Export and brand



# Nordic Welfare Solutions



## Goals

Nordic co-operation's answer to Agenda 2030

— Contribute to global challenges related to an aging population (UN goals 3,9 and 12)

— Pave the way for increased export (through Nordic cooperation)

Stronger **Nordic branding** and storytelling

Create **critical mass** and stronger Nordic networks

Create **better access** for Nordic companies

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# Global challenges within health

- Demographical change → more elderly people → pressure on resources
- Less «warm hands» / resources for care
- Increasing costs



## We need to:

- Do things differently
- Cooperate smarter
- Use new technology
- Create business opportunities world wide
- **Transform healthcare**



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# Three action areas – project plan



Branding and  
storytelling



Public advocacy



Nordic solutions  
and value chains

2017-2019: 17 MNOK

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# Nordic export task force

## Denmark

- **Tine Hylleberg**  
Danish Trade Council
- **Hans Erik Henriksen**  
CEO, Healthcare Denmark
- **Christian Graversen**  
CEO, Welfare Tech
- **Annette Rye Larsen**  
Project Manager, DTU

## Sweden

- **Niclas Emanuelsson,**  
Business-Sweden
- **Maria Helling**  
CEO Swecare
- **Anna Lefevre Skjöldebrand**  
CEO, Swedish Medtech
- **Daniel Eriksson**  
CEO, Nordic Centre for Sustainable Healthcare

## Finland

- **Minna Hendolin**  
Director of Health and Wellbeing, Business Finland
- **Eero Toivainen**  
Programme manager, Business Finland
- **Saara Hassinen**  
CEO, Healthtech Finland
- **Sara Härmälä**  
Director, Upgrade

## Iceland

- **Andri Marteinnsson**  
Director, Promote Iceland
- Federation of Iceland Industries

## Norway

- **Hans Eirik Melandsø**  
Hub leader health, Innovation Norway
- **Kathrine Myhre**  
CEO, Norway Health Tech
- **Arild Kristensen**  
Cluster manager, Smart Care Cluster

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# *Our Work 2017-2018*

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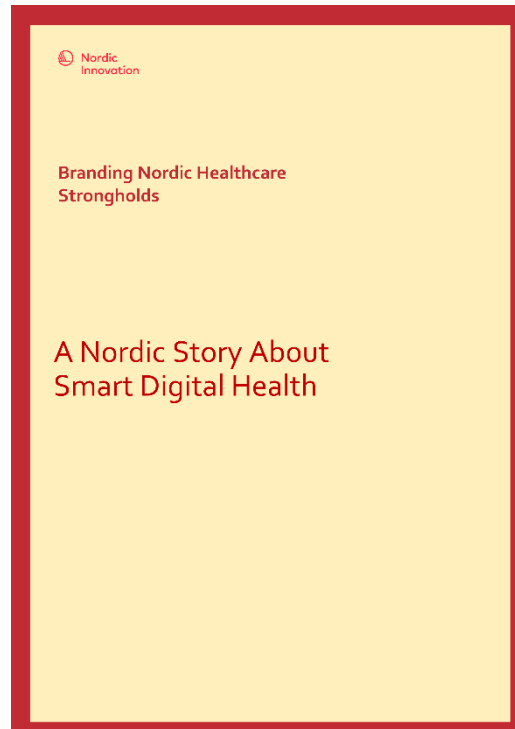
01/11/18



# Branding material



March 2018

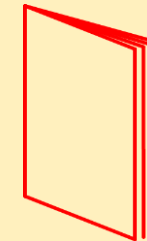


August 2018

## Target groups:

- Embassies
- Export agencies
- Clusters
- Companies

## Pipeline 2018:



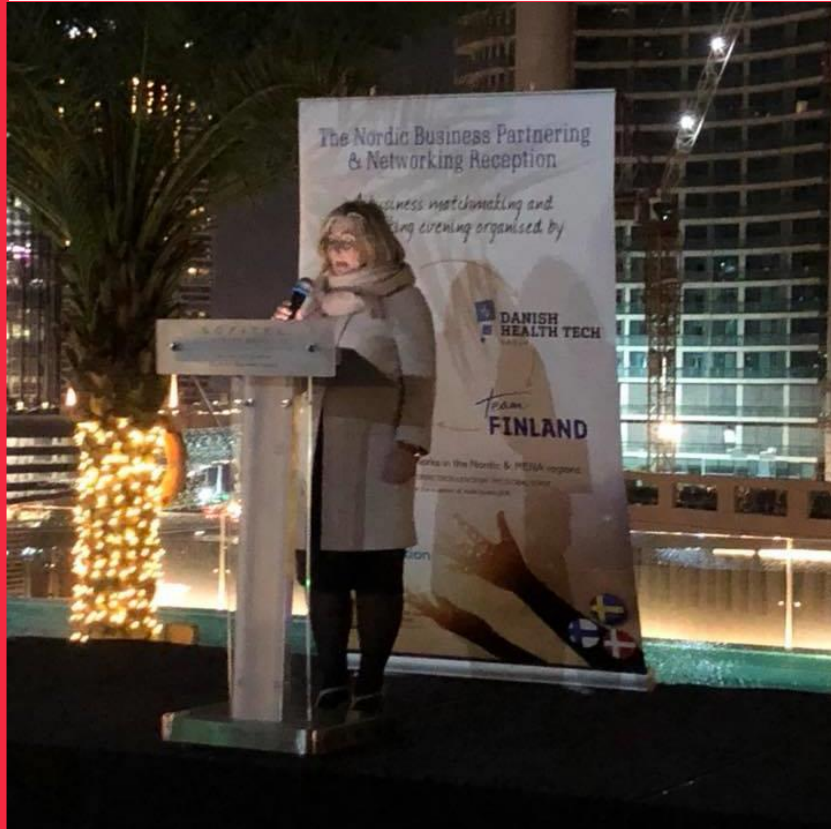
White paper on Smart Digital Health  
White paper on Assisted Living  
White paper on Sustainable Hospitals



Video produced on Smart Digital Health



# Business leads



Arab Health Feb. 2018  
Tel Aviv Nov 2018



Business leads in Canada



Two Business leads projects in  
Germany



# Arab Health Value chain collaboration

The Nordic Business Partnering  
& Networking Reception

*A business matchmaking and  
networking evening organised by:*

SWEDEN  
THE SWEDISH TRADE & INVESTMENT COUNCIL

THE INNOVATION  
PAVILION  
by Sweden  
A GLOBAL PHARMA CONSULTING INITIATIVE

Team  
FINLAND

Expand your networks in the Nordic & MENA regions  
TO PROMOTE NORDIC EXCELLENCE ON THE GLOBAL STAGE  
on the occasion of Arab Health 2018

Supported by  
Nordic  
Innovation

SOFITEL  
LUXURY HOTELS  
Dubai Downtown

# Medica 2017

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# ***Business leads: Toronto***

*Strengthening the position of Nordic companies in Canada through strategic Nordic cooperation.*

*Project leader: Norway Health Tech (NO)*

- Established a well-functioning Nordic **TPO** cooperation (shared office space)
- Business Finland established local presence
- Met with great interest from hospitals and elderly care centers
- Phase 1: 25 Nordic companies
- Phase 2: 10 Nordic companies



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# ***Business leads: Germany***

*Creating business opportunities through targeted Nordic efforts.*

*Project leader: Welfare Tech (DK)*

- Starting Fall 2018
- Cluster-to-cluster approach
- Goal: *At least 3 Nordic companies establish collaborations on*
  - *new value chains*
  - *integrating their solutions, or*
  - *developing new solutions.*
- Phase 1: 60 Nordic companies
- Phase 2: 10 Nordic companies



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# *Tel Aviv Nov. 2018*

- Healthcare as a leverage for smarter and more circular cities
- Delegation to Tel Aviv to increase business, knowledge and collaborations within sustainable healthcare solutions and smart, circular cities.
- Solutions of interest is, among others, circular waste solutions, energy solutions, new materials, e-health, logistics, water monitoring & saving and ICT-solutions.



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# *Strongholds and Qualities of the Nordic Health Tech Ecosystem*

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Arvid Løken, Nordic Innovation



The Nordic healthcare system is **outperforming** the US in terms of **health outcome** for the population **per dollar spent**



# Trump May Get a Health-Care Lesson From the Danish Prime Minister

By Nick Rigillo

29. mars 2017 16:02 Updated on 30. mars 2017 10:06

- Nordic health care delivers better results at fraction of cost
- U.S. president hosts Rasmussen at White House on Thursday

Medisin

Nyheter Debatt DM Arena DMTV



BLIKKET MOT NORGE. Senator Bernie Sanders ser til Norge når han vil forklare hvorfor den norske helsetjenesten skårer høyt på mange parametere. Illustrasjon: Colourbox

USA LOOKS TO NORWAY

## Norsk helsetjeneste inspirerer amerikanerne

Staben til den amerikanske senatoren Bernie Sanders kontaktet en norsk professor. Resultatet ble en video om helsevesenet i Norge, som det første døgnet ble sett av over 470.000.

HEALTH CARE  
NORWAY VS. U.S.



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Norway vs. U.S. on Health Care  
Posted by U.S. Senator Bernie...  
739,901 Views





*The Nordic countries are acknowledged for **digital advances** and **unique register data***



15.09.2016

# FINLAND AND IBM'S WATSON TEAMING UP TO DEVELOP PERSONALIZED HEALTHCARE

Finland and IBM are teaming up to develop personalised healthcare and spark economic growth with Watson.

The screenshot shows a GovInsider article. At the top, the GovInsider logo is visible with navigation links: CONNECTED, DIGITAL, INCLUSIVE, INNOVATION, SECURITY, SMART, EVENTS, ABOUT. A search bar is on the right. The article title is "Icelanders can now download their own health data" with a sub-headline: "Iceland is the first country in the world to allow citizens to access digital copies of their health data." The author is "By Heather Roberts" and the date is "6 JAN 2017". The article text states: "In a world first, Iceland is now allowing its citizens to download their health data. Users may access their own health data securely through an app called digi.me, which uses 'unique' personal data technology. They will have access to data such as prescriptions and medications, vaccinations, allergies and medical admissions, according to the digi.me website. The digi.me app allows users to 'gain greater insight and control over their health and treatment'. The project is supported by Iceland's Directorate of Health (DOH), which worked with local companies to develop an API to integrate with digi.me, according to the website. Digi.me is currently being test bedded in Iceland before being introduced to other countries." Below the text is a small image of a colorful water drop logo with the text "digi.me it's your life".

A graphic with a dark background and a blue sky with clouds. The text reads: "FINLAND COULD BECOME A WORLD CLASS INNOVATION HUB IN HEALTHCARE".

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# *Core qualities*

Societal features impact on whether a business sector develops into a stronghold, and if it continues to grow, for example through exports.

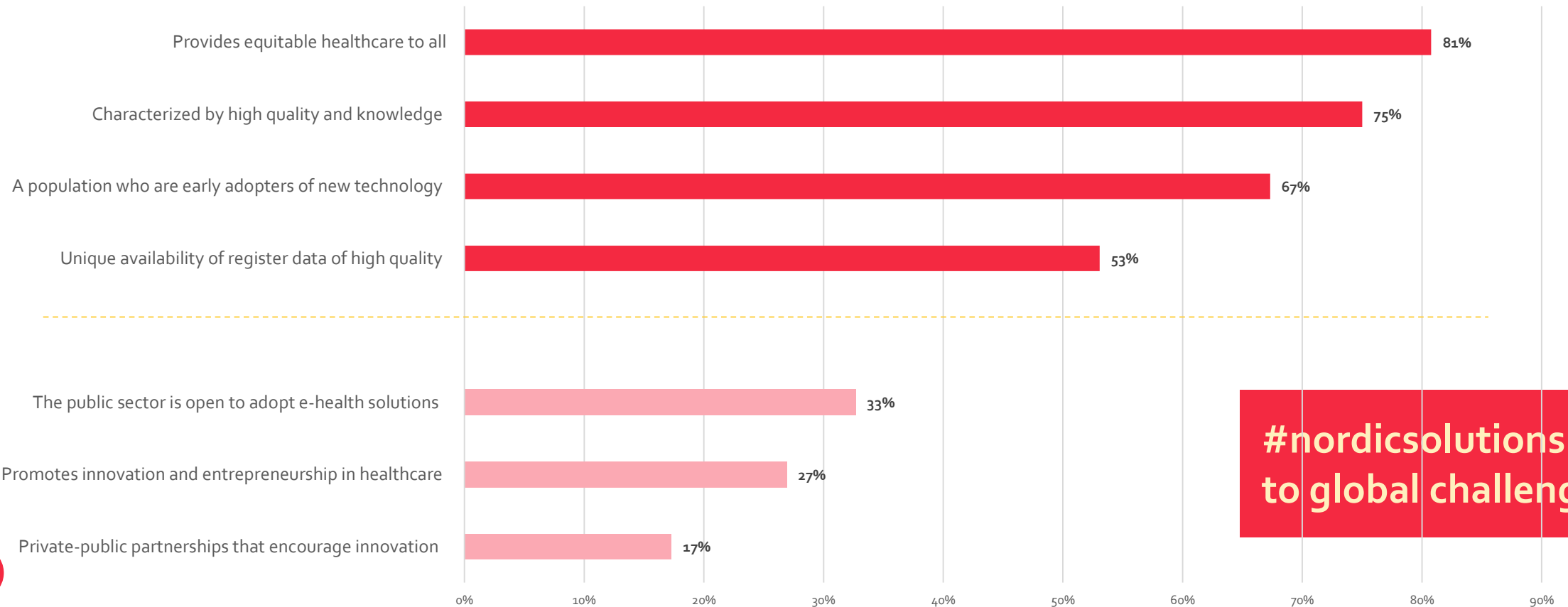
The Nordic countries have characteristics that makes the region attractive for research, testing and production of health tech.

- **Equitable healthcare to all**
- **High quality and knowledge**
- **Early adopters of new tech**
- **Strong demand for welfare tech**
- **Strong tech environment**
- **Sustainable healthcare**



# Core Qualities: Healthcare systems that deliver high outcome – high tech society and high quality data

Top- and bottom-ranked core qualities from survey. Share of respondents that either “agrees” or “strongly agrees” with the suggested core qualities



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# Environmentally sustainable healthcare

The Nordic region is at the forefront of environmentally sustainable healthcare.

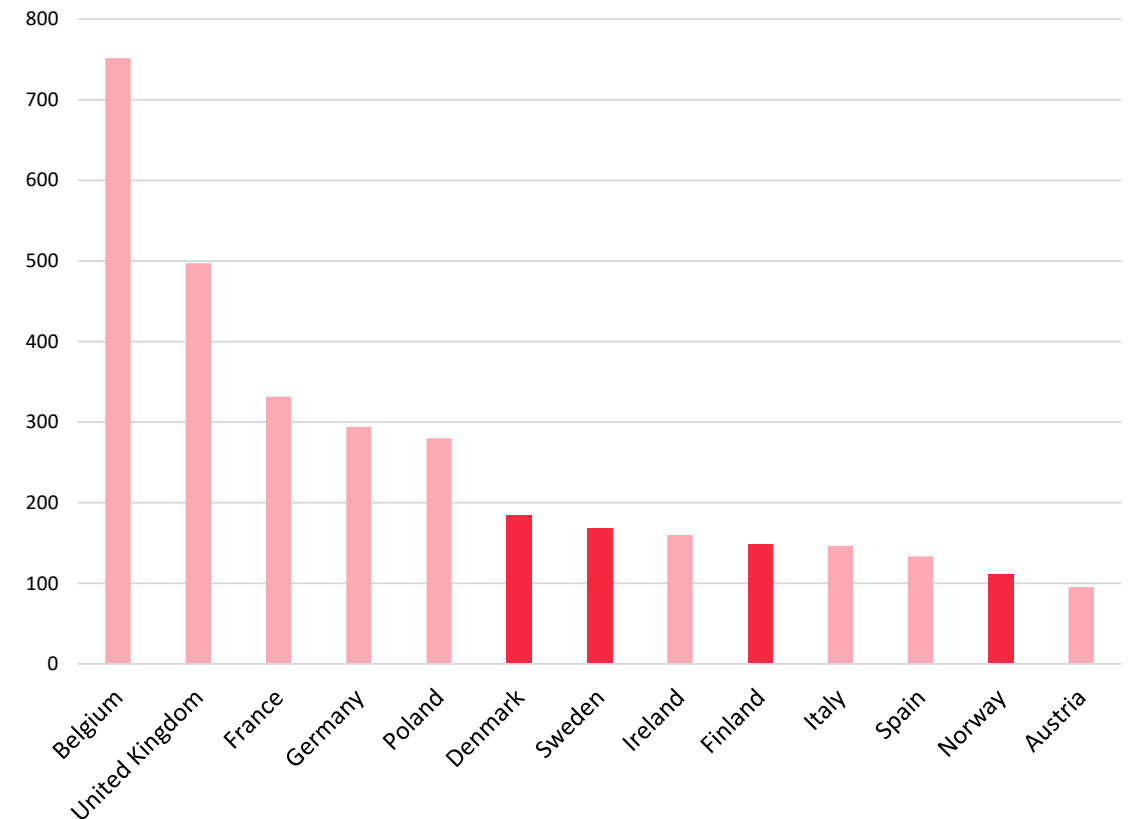
## Indicator benchmarking

- The carbon footprint of Nordic healthcare activities is relatively low

## Result from literature review

- Public-private partnership programs in the Nordics have resulted in the development of environmentally sustainable products, such as the previously mentioned PVC-free blood bag

Carbon dioxide (tons) per thousand inpatient care discharge. Human health and social work activities in 2014. Source: OECD (2017) and EuroStat (2017)



*The Nordic countries deliver **economic performance** on the one hand and top **health performance** on the other. Now what about the combination – **health business**?*

**“A range of health indicators (...) suggest that Nordic countries are performing well compared to the OECD.”**

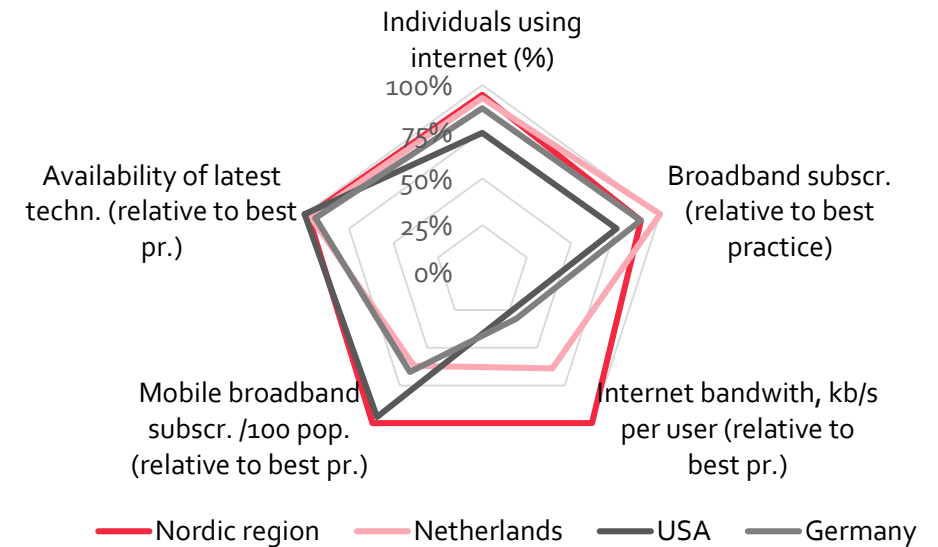
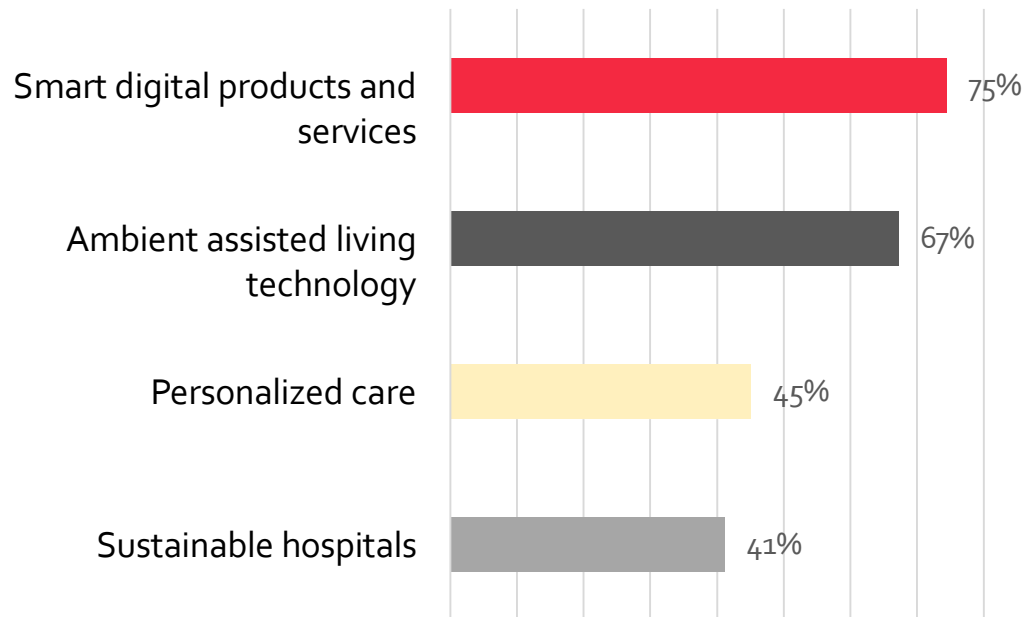
OECD, 2017



# Smart digital solutions

ICT infrastructure and level of sophistication in the Nordics, relative to other advanced economies (2016). Source: World Economic Forum – Global Competitiveness Report, 2016

Share of respondents assessing the export potential of the Nordic health tech sector as “very high” or “high”



Overall rank (equal weighing of indicators):

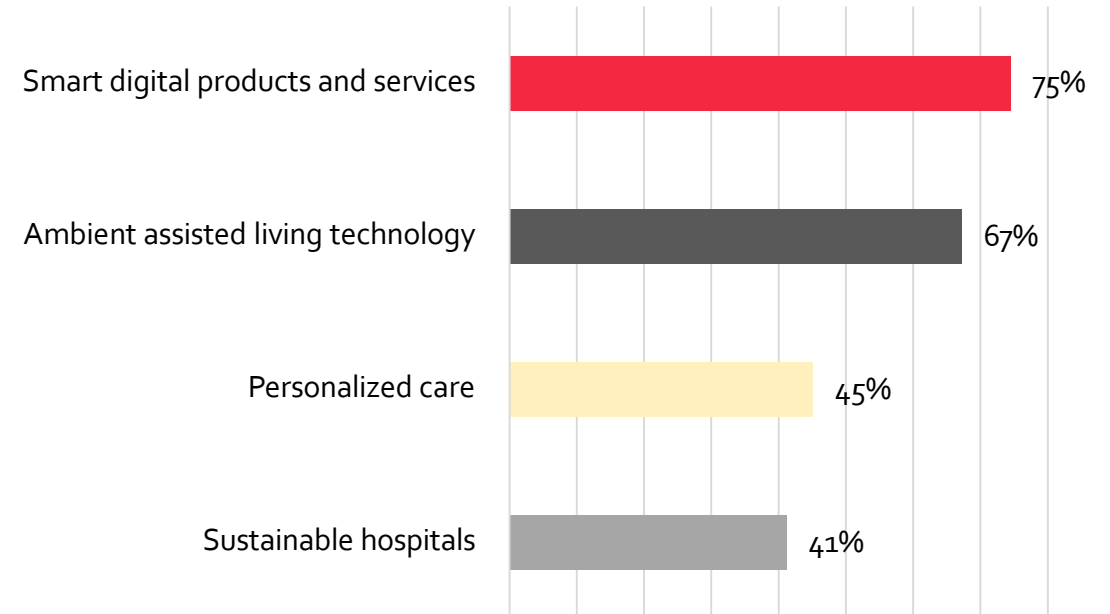
1. Nordic region
2. U.K
3. Netherlands
4. USA
5. Germany



# Ambient assisted living technology

## Opportunities

- A growing international market due to ageing populations
- Global increase in lifestyle diseases contributes to growing focus on helping people live healthier lives
- Given the Nordic model of facilitating for the elderly and disabled, combined with a high digital and technological knowledge, the region is ideal for development and testing of products and solution
- Wellness solutions can be easier to export as products can be sold directly to the end-user market



# Personalised care

## Opportunities

- The demand for personalized medicine, the use of real world data and other big data trends in healthcare
- The Nordics are well-positioned to be at the forefront through register data, a digitally savvy population and a high level of trust

## Challenges

- Limited use of the register data as of today. Easier access is needed
- Small populations and limited public private innovation might challenge the Nordic competitive position in this market



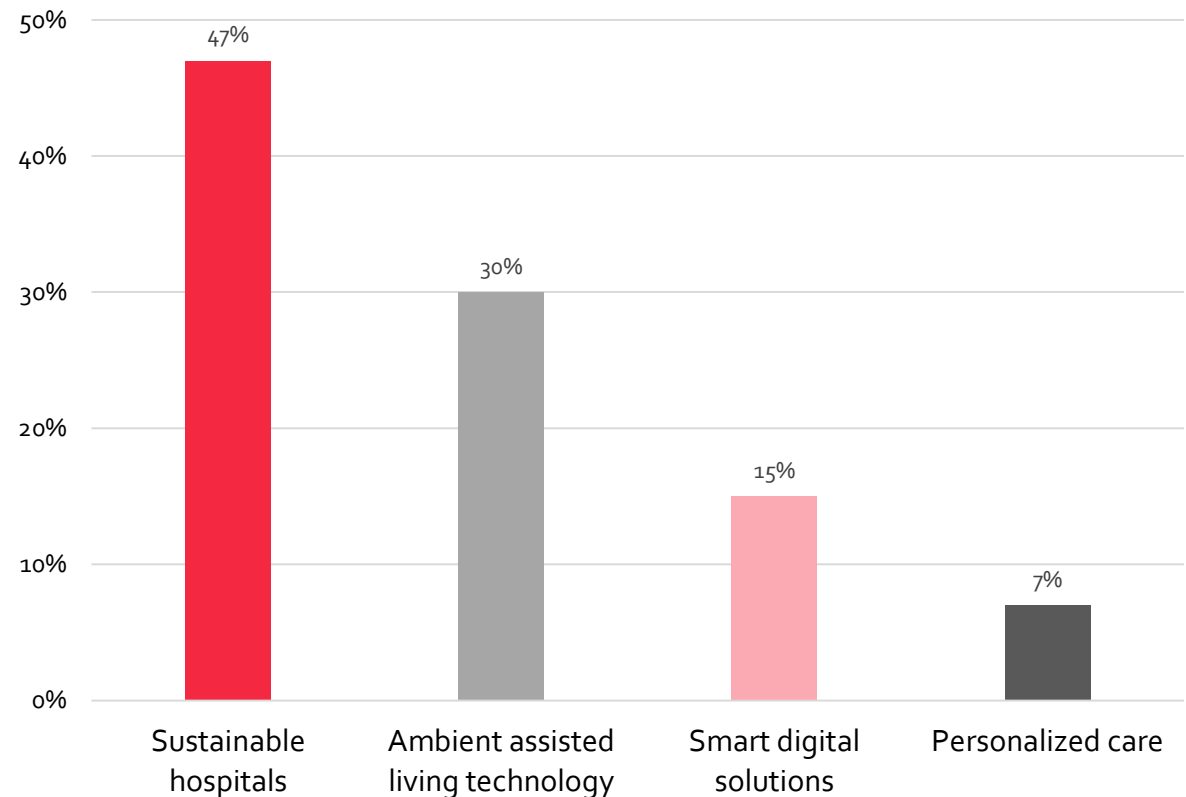


# *Sustainable and innovative hospitals*

## Opportunities

- Demand for Nordic competence and solutions based on experience from building sustainable hospitals in the Nordic countries
- Complementary competences and offerings, making the Nordics stronger together
- Potential for joint consortia offering “turnkey” solutions for hospitals

Distribution of Nordic companies by strongholds. Percent of total. Source: Menon (2017)



# Nordic strongholds – sub-categories and definitions

| Stronghold                              | Sub-category  | Definition  |
|---|---|---|
| Sustainable Hospitals                   | Architecture, construction, and engineering                             | Architects and construction companies specialized in building sustainable hospitals   |
|   | Solutions for increased energy efficiency and environmental performance | Solutions and systems such as ventilation systems, waste and water management systems, etc.                                 |
|   | Logistics   | Solutions related to logistics, transportation systems and virtual planning, IT systems, and hospital equipment (furniture) |
|   | <i>Medical devices</i>  | Medical equipment such as diagnostics, imaging technology, scanners, x-rays, etc.   |
| Smart Digital Solutions                 | E-health and solutions that facilitate communication                    | Solutions that facilitate communication between health personnel and between health personnel and patients                  |
| Ambient assisted living technology      | Self-care solutions   | Solutions that enable patient self-care (treatment at home instead of at hospital)  |
|   | Rehabilitation equipment  | Solutions that facilitate rehabilitation  |
|   | Fitness and wellness  | Products that enhance health and well-being, but do not treat disease or illness (wellness)                                 |
| Personalized Care (through health data) | Personalized care   | Products that collect and/or use BigData to create personalized medicines or treatments                                     |







*Thank you*

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# Data and method

Five sources/methods to verify and test strongholds, export potential and core qualities



Company database



Interviews



Online survey



Literature review



Empirical benchmarking

## Aim

- Create a systematized database that can be used to analyze patterns of strengths within the Nordic business populations and to identify companies for an export promotion effort

## Result

- Database with **over 500 companies**, categorized under strongholds and products

## Aim

- Collect qualitative data through interviews with experts from all five Nordic countries to verify strengths and identify areas of joint interest and opportunities

## Result

- Expert views from about 15 interviews collected and synthesized

## Aim

- Collect quantitative data on businesses' views on strongholds, export potential and core qualities

## Result

- Survey sent to approx. 350 companies. Interim response rate 15%, collection still ongoing

## Aim

- Collect qualitative data based upon existing studies and data

## Result

- Relevant information from a large set of reports and material from all five countries extracted, analyzed and summarized

## Aim

- Collect quantitative data and construct indicators for use in benchmarking

## Result

- International trade data and overview of health tech clusters used for constructing indicators and analysis

