Guide to the Nordics – the health and care sector
# Table of content

## The Nordic countries
- About the Nordic countries ......................................................................................... 7
- A bit on the guide and some general advice ................................................................. 8
- Entering a market by product testing in municipalities ............................................... 12
- Megatrend examples in Nordic healthcare ................................................................. 14
- Customer journey ......................................................................................................... 16
- Public procurement ....................................................................................................... 18
- Dialogue with municipalities – Tools to consider ....................................................... 18

## Cases
- Case 1: Motitech – Conquering the Nordics in three years ....................................... 22
- Case 2: Evondos – Winning the battle of non-adherence ......................................... 24
- Case 3: BEKEY – Accessible access .......................................................................... 26
- Case 4: Camanio Care – Bikes, giraffes and dinners ............................................... 28
- Case 5: Össur – Bionic trailblazer .............................................................................. 30

## Appendix
- Iceland ............................................................................................................................ 34
- Sweden ......................................................................................................................... 38
- Denmark ....................................................................................................................... 42
- Norway ......................................................................................................................... 46
- Finland .......................................................................................................................... 50

## Appendix
- Vocabularium ............................................................................................................... 58
Where to start?

Do you have a solution for the health- and care sector that you are considering introducing to Denmark, Sweden, Norway, Finland or Iceland?

Are you aware of the similarities – and differences – between the Nordic countries when it comes to their health and care sectors?

The following guide provides an overview of the health and care sectors in the five Nordic countries. The information has been put together by the Nordic Business & Living Lab Alliance, a project supported by Nordic Innovation. The goal of Nordic Innovation is to assemble tools and methods for co-creating and testing health and care solutions in collaboration between companies and Nordic municipalities.

Read more about Living Lab Alliance here
Contact project manager, Christian Brix, here
The Nordic countries consist of Finland, Iceland, Norway, Denmark and Sweden. Five countries situated in Northern Europe, having close cultural and historical ties. The countries have many similarities in how societies are organized – having a large public sector, high level of taxes, free and equal access to public health care as well as universal coverage (i.e. that all citizens are entitled to free public health care benefits).

The Nordic countries also face some of the same challenges. There is – as in many other Western European countries – a changing demography, with a growing proportion of elderly people who are also living longer. This demographic change places pressure on the public health care systems, as there are and will be more people requiring health services, as well as more people with chronic illnesses who demand special services. To tackle these challenges, many projects throughout the Nordic countries are focusing on better use of resources, including public-private partnerships and adopting new health and care solutions. These solutions aim at supporting more independent living for the citizens, supporting rehabilitation and improving the quality of the services that the public sector offers. They are a focus area for all the Nordic countries.

Though they share many similarities, the Nordic countries also have their differences. A Norwegian, a Swede and a Dane might understand each other’s languages (to some degree) but the Finnish and the Icelandic languages are completely unrelated. There are also differences in terms of how the countries have adopted different kinds of health and care technologies as well as how the countries organized their respective primary and secondary care systems.

It is said that the Nordic countries are so alike that they can easily work together, yet so different that they can still learn a lot from each other. With this guide, we hope to highlight some of the crucial similarities and differences and to help create the bridges throughout the Nordics. In building these bridges, we can disseminate knowledge about good health and care solutions for the benefit of the Nordic countries and their citizens, as well as for companies seeking to enter the Nordic market.
A bit on the guide and some general advice

In the Nordic Business & Living Lab Alliance, we focus particularly on independent living, e.g. solutions empowering people to be able to stay and live longer in their own homes. The information in this guide therefore highlights health and care solutions that can facilitate independent living. Focus is on the primary care sector – run mainly by the municipalities – and how municipal health and care services are organized in the different Nordic countries.

However, if your product or service offering falls within other areas, e.g. targeting hospitals, you should still be able to gain useful information from the guide on how the health care systems of the different Nordic countries are organized.

We have chosen not to include detailed country and market information e.g. on size of country, number of inhabitants, number of elderly people, number of chronically ill, etc., as this information is readily available on the internet and Wikipedia.

The importance of careful preparation to enter a new market cannot be overstated. Read through this guide, browse the Internet, Wikipedia and other sources – there is lots of useful information available. Spend time on preparation and on developing a strategy for how to enter a new market. Visit some of the fairs and conferences on health and care in each country. Visit some of the relevant health care organisations under each country description in the appendix to this guide.

Sometimes companies enter new markets by luck or coincidence – they just happen to meet the right person at a fair who can distribute their products and help introduce them to a new country. This is a classic situation, and sometimes it can go very well. Just as often, however, these chance meetings can result in poor execution, a waste of resources, a confusing tangle of different agreements with random distributors in markets or countries that do not generate the expected profit. To avoid these potential disasters, the best advice is to make sufficient preparations and to focus on selected countries.

Working with local distributors or collaborators can be a good way to penetrate a new market. As with the general strategy – spend time on preparation and on performing due diligence before entering into an agreement. Sometimes it is also best to get a foothold in the market, e.g. doing a test or demonstration of your product together with a public sector institution, such as a municipality, and then getting that first sale before engaging with a distributor. Getting your feet wet with a single, manageable customer gives you a better understanding of the market, and more importantly, a better position to negotiate a contract.

For exports and for finding local partners – distributors, customers etc. – you can also obtain assistance e.g. through embassies, export councils and so >
on, dependent on your home country. Also, each of the Nordic countries has clusters and other organizations working in the health and care area. Looking into what these clusters are doing and their list of members can give you a rapid understanding of the competition, as well as leads on local partners for collaboration. In the appendix to this guide, we have highlighted these organizations for each of the Nordic countries.

It is also highly recommended to contact the Enterprise Europe Network, which operates in more than 60 countries, and has local offices in each of the Nordic countries. Enterprise Europe Network is an extensive network of business advisors around Europe and the rest of the world. It helps small and medium sized companies trade more internationally, through finding business contacts and technology partners, connecting them with research and innovation specialists and institutions as well as answering questions about markets and market conditions, especially related to the EU internal market. They can answer your questions about specific market conditions as well as assisting in finding relevant local distributors or other types of business partners.

Read more about and contact Enterprise Europe Network here
Enter a market by product testing in municipalities

If you are considering exporting your health and care solution to one of the Nordic countries, you should be aware that many Nordic municipalities will often want to test your product before signing a contract. This is especially true if your product is new and innovative and not a standard solution with which the municipalities have experience.

For testing prospective products, some of the Nordic municipalities have established dedicated test processes and organizations often known as ‘living labs’ or ‘test beds’. Here new solutions are co-developed and tested together with users and staff in order to assess usability to the municipality and their citizens. Some of the living labs are more focused on co-creation and development of new solutions together with companies, while others limit themselves to testing products prior to purchase.

Submitting your product for testing by a municipal living lab can be a great way to obtain additional market information and an understanding of users, their needs and the context in which your product will operate. Living lab testing can facilitate your entry into a new country, a new market and can provide you with network, references and knowledge about competing solutions. However, it is important to keep in mind that test results can often not be directly copied from one municipality to another. Hence, just because your product has tested successfully and been implemented in one municipality does not mean that the neighbouring municipality will not want to conduct their own test. Similarly, a successful launch and implementation in several Swedish municipalities does not mean that you can directly sell your solution to Finnish or Danish municipalities.

What constitutes a ‘test’ of your product can vary immensely from one municipality to another. In some cases, the test might be limited to a two-hour focus group with some staff and end-users. In other cases, testing a new solution might involve leaving the product behind in the living lab for months at a time while the staff test out your solution in a variety of settings. The test might even be carried out in a real-life setting such as a nursing home to assess whether it could be implemented in all the municipality’s nursing homes. As there is no clear definition of what constitutes a test, it is particularly important to understand what tests are being considered and what the purpose of the test should be – both in terms of what you want to gain from testing and collaborating with the municipality and what the municipality or living lab wants to gain from testing your product.

To sum up, keep in mind that:

• The information you obtain from a collaboration and test with a municipality is local and not necessarily representative for the entire market you want to enter.
A professional test and successful result requires time and presence on your part. It also requires that you have a clear idea of your own and the municipality’s expectations for the results of the collaboration and test.

The time period from successful test to actual sale often takes a long time. Expect a minimum of half a year and often longer. Consider whether you can allocate the needed resources to the subsequent sales work. It is costly to start up in a new market, so make a budget.

You need to be keen on what your own goals are when you submit your product to municipality or living lab testing. If the test results in a sale, that’s fine. But there are other potential benefits of testing: gaining input for further product development, obtaining more detailed market knowledge, getting user references, obtaining documentation for a business case, etc. Be clear on what type of input and knowledge you are pursuing when you submit your product for testing.

The hazards of test collaborations

Testing together with a municipality – for example in a living lab context – can be a shortcut to a sale. However, it may also be an expensive detour, with time wasted and resources spent without any real results. This can also happen even if the test results are positive and even if the end-users and staff from the municipality are very positive about the solution; something which can make the testing experience all the more bittersweet. There are numerous reasons for why this might happen. If you are carrying out a test collaboration over a long period of time, changes in the municipal administration and in the political agenda might postpone any procurement of your product. It may also be the case that while the test of your product may have been positive, other products or systems might negatively affect the implementation and hence the procurement. For instance, if the municipality decides to procure a new IT platform, this may cause delays in purchasing new products until the new IT platform is fully implemented.

Another factor that can affect the result of your test collaboration can be the persons with whom you are working in the municipality. It might be that your test with the end-users and staff showed positive results, but that the people in charge of the actual purchasing decisions were left out of the loop. This is a classic problem in going from ‘test’ to ‘sale’. There is also an inherent risk with the whole concept of municipal ‘living labs’, in that these forms of innovation or test units can operate detached from the actual operations and hence generate artificial or irrelevant results. In other cases, the goal of the living lab is not so much to assess specific solutions for procurement, but rather, to experiment and test new products so that the municipality can decide whether to invest in these types of solutions in the future.

It might be also that there are no clear processes for converting positive test results from a municipal living lab into actual procurement decisions. In many cases, the living labs are in a position where the results of their work end only in recommendations, as the actual procurement is carried out by other units in the municipality. This recommendation might be very important for getting a sale in the long run, but the short-term result of the ‘We’ll get back to you’ can be frustrating.

Does this mean that you should not engage in test collaborations and living labs? Certainly not. But it does mean that you need to be clear about the expectations and resources that you are investing in the collaboration and what you hope to get out of it. If you engage in any forms of public-private innovation and test collaboration, it is vital to have a clear, down-to-earth expectation of what you want to achieve from the collaboration. And it is also vital to have concrete discussions with the municipality or living lab representative as to what their expectations and what the mutual expectations should be. These expectations should then drive the form of the collaboration and the types of test you will be carrying out together.

Find a test facility here. An overview of the Nordic test facilities within health and welfare.
Megatrend examples in Nordic healthcare

#1 A dramatically growing group of older citizens
Nordic healthcare systems, faced with a dramatically growing group of older citizens, will need to find innovative ways to deal with the medical and functional needs of an aging population. With this trend will come a rapidly-growing Nordic market for health and welfare solutions, both specific technologies and products, but also services and the need to rethink workflows.

#2 From hospitals and clinics to homes and municipalities
Driven by the rise of new technologies, it is anticipated that a major part of healthcare as we know it today will move from hospitals and clinics to homes and municipalities. From smartphones to social media to sensors, new tools are empowering consumers and patients, giving them more information and more control over their healthcare decisions.

#3 Empowerment – citizens take charge
There is a pervasive societal trend towards the citizen being encouraged to take more active responsibility for their own situation and rehabilitation (empowerment). As citizens obtain both more information about their own health issues and better tools for monitoring their own behaviours and health status, they are also gaining more control over their care. The key words will become those such as ‘Engaged Citizen’, ‘Responsible Citizen’, ‘Active Citizen’ – but also ‘Insured Citizen’.

#4 More with Less
Doing more with less is an overarching theme of the Nordic healthcare systems. Economic pressures will compel regions and municipalities to find new ways to support higher quality, achieve better outcomes and create greater patient satisfaction, all while reducing costs. ‘Value’ will be a central focus, as the Nordic countries seek to obtain maximum results for every krone spent.

#5 Globalisation of health- and welfare technologies
The Nordic healthcare market will be greatly affected by an intense global exchange of knowledge, innovative approaches, technologies, products, capital and labour. There is new potential for Nordic companies to become key players on the global export market. However, globalization also creates opportunities for non-Nordic businesses to obtain easier entry to the Nordic market than earlier.
New technology – robots and artificial intelligence (AI)
Increased dissemination of robotic technologies and AI will automate a range of tasks in the healthcare system. Automation will affect clinical tasks such as operations and diagnosis as well as service tasks and monitoring of optimal workflows and inventory.

Health data
The amount of information and health data has never been greater, and this amount will rise explosively thanks to the use of innovative apps and new software.

Close cooperation between the regions, municipalities and private providers
In the Nordic countries, treatment and rehabilitation services as well as home care are carried out in close cooperation between the regions and municipalities. A tendency can be identified for the increased involvement of private providers in the health sector. The future will see intensified efforts to facilitate cooperative relations between municipalities and regions regarding healthcare service offerings to citizens.

‘Tailor-made’ prevention and treatment solutions
As it becomes possible to obtain more detailed knowledge into an individual’s health and their genetic data, more individualized treatment and prevention offerings will become available.

The health service of the future will be proactive instead of reactive
There is an increased focus on prevention, health and physical well-being rather than treatment. New innovative technologies and the collecting of healthcare data will provide the opportunity for a proactive approach.
In the Nordic countries, treatment and rehabilitation services as well as home care are carried out in close interaction between the regions and municipalities. This Customer Journey illustrates what touch points may arise for a citizen who falls in her own home and suffers a broken hip. From the time that the citizen herself calls the emergency call centre, the regional emergency unit is mobilized.

- **Regional responsibility**
  The ambulance and hospital carry out treatment and execute the initial rehabilitation plan. When the citizen is discharged from hospital, responsibility for the patient is transferred to the municipal treatment and rehabilitation programs. After returning home, the citizen will be visited by a municipal district nurse.

- **Municipal responsibility**
  The nurse assesses what kind of home care should be undertaken. In recent decades, a practice has developed in which regional and municipal treatment offerings and services are increasingly executed by private providers.

- **Public and/or private supplier**
  Indicates where there is an opportunity for private providers to supply healthcare financed through
public budgets. Tasks undertaken by private providers have been offered in competitive public tenders, such that for a number of years, providers have a contract with a regional or municipal authority.

At the same time, there is a pervasive societal trend towards the citizen being encouraged to take more active responsibility for their own situation and rehabilitation (empowerment).

- **Citizen**
  This rehabilitative approach means that the citizen himself assumes part of the responsibility for their home care services, such as practical assistance, e.g. cleaning, and personal care.

  The half red touch points thus indicate a rehabilitative approach whereby the citizen is instructed in self-reliance and in how they can take responsibility for their own situation.
Public procurement

Having the public sector as your customer entails a set of rules and routines. There are (clear) rules for procurement, there are yearly budgets, there are rules and regulations for transparency and so on.

Often you will also be selling a product where the buyer is not the end-user (the end-users will instead often be citizens in need of health and care services). The rules and regulations are quite similar in all the Nordic countries, being based on EU regulations for procurement. However, the interpretations and culture around procurement practices might vary quite a bit from one municipality to another. In some municipalities, it might be quite easy to talk to potential public sector purchasing agents – whereas in other countries might be quite difficult, as there is a culture in keeping a distance between the procurement officer and potential suppliers. This is also affected by the culture and rules surrounding objections to procurement procedures; i.e., how normal and how costly it might be for competitors to present objections to a winning bid on a tender.

Dialogue with municipalities – Tools to consider

It is imperative to keep in mind that municipalities are focused on daily operations. Their core task is the day-to-day delivery of services to their citizens. As such, the municipality’s priority is to ensure that the products and services they buy fit this end.

You will be evaluated on how well your products can improve the user experience and/or the business case of the municipality. You therefore need to prepare and consider how to pitch your product so that the municipality understands it and how your product can benefit them. A rule of thumb is to talk less about your product and more about the need that it addresses. What special need does your product fulfill? What problem is your product a solution to? What difference does your product make for the end-users? What user stories do you have from people using your products?

When preparing your presentation of your product, it is also important to understand the chain of command and to be clear about which type of professional specialists you need to meet and whom you are meeting. Keep in mind that the decision-making processes in a municipality can be long and complex, so be realistic about your expectations, and be clear about the resources you can allocate and what activities you can initiate elsewhere while you await a decision.

To ensure effective meetings with municipalities, a useful tool is The Business Model Canvas (BMC). The BMC is a tool that allows you to describe, design, challenge, invent and pivot your export model. It provides a framework for a pragmatic export (business) model as a backbone to your future actions, and it works as your key tool when presenting your export model to management, partners, customers and other stakeholders.
What you choose to present in a meeting depends on which institution with whom you are in contact. Hence, the key factors you should consider will vary according to the context. The Business Model Canvas consists of nine elements, with some elements being more important in the municipal context than others. These more essential elements will be presented below, and they will need to be emphasized in advance of a meeting.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
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<tbody>
<tr>
<td>Customer segments</td>
<td>The first element to consider are the <strong>customer segments</strong>, i.e. what basic need are you covering? As previously mentioned in the guide, a particularly important aspect to consider from a municipality perspective is to clarify which services and end-users your business creates value for. Furthermore, you should be fully aware of what makes your product stand out from already existing products being offered in the municipality.</td>
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<tr>
<td>Key resources element</td>
<td>A second element to assess are <strong>value propositions</strong>, defined as the bundles of products and services that create value for your customers. What problems are you solving? In the healthcare sector in particular, the municipality considers user-involvement, independence and safety as core values. In addition, there is an interest in how your business can create benefits and savings by increasing the quality of the services offered, minimizing costs and reducing time spent. Although quality is emphasized, there is no priority of values such as exclusivity or solutions limited to an elite.</td>
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<tr>
<td>Communication channel</td>
<td>The next element you should consider is which <strong>communication channel</strong> is best suited to reaching your customer base. Where are you interacting with your customers and delivering value? From a municipal point of view, there may be some preferred communication channels. For example, factors such as citizen privacy and security affect the choice of communication channel.</td>
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<tr>
<td>Customer relationship</td>
<td><strong>Customer relationship</strong> is another component to take into account. You need to consider what type of relationship you want to establish with your customer. From a municipal point of view, a clearly defined division of responsibilities between the supplier and the municipality is necessary. What is expected of your business, and what is expected of the municipality? How do you plan to involve the end-users, and are you open to making changes in the delivery based upon the user feedback you receive?</td>
</tr>
<tr>
<td>Key activities</td>
<td>A fifth element to reflect upon is <strong>revenue stream</strong>, which includes how and through which pricing mechanism the business model is capturing value. The municipality’s interest is less in how your revenues are anticipated to grow and more in what payment alternatives are available. For example, the municipality might prefer a leasing agreement to outright purchase. New technology is in rapid development, and the municipality might prefer the leasing option so as to ensure that the product does not become outdated.</td>
</tr>
<tr>
<td>Key activities</td>
<td><strong>The key resources element</strong> gives an idea on which assets are available in your business model. What infrastructure do you have in place to create, deliver and attain value? From a municipal view, it is important to know the supplier’s core competencies. In knowing these, the municipality obtains a clearer sense of what you do not cover, and what competencies will be required from the municipality and from other partners.</td>
</tr>
<tr>
<td>Partnership element</td>
<td>In addition to key resources, every business has certain <strong>key activities</strong> they maintain to ensure that they operate successfully. What unique strategic activities does the business carry out in order to deliver on its propositions? As previously mentioned, the core values in the municipality are often related to independence and safety; thus, activities such as quality control, risk management and user-involvement are considered by the municipality to be important key activities that any potential business partner must provide.</td>
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<tr>
<td>Cost structure</td>
<td>As a business, you will not necessarily hold all the key resources by yourself. You will also need to emphasize the <strong>partnership element</strong> as well. The partnership element is essential in order to show how others will contribute in distributing the delivery in the suppliers’ business model. To cover the gaps in competence, many suppliers need to obtain expertise from elsewhere. If competence is derived from other sources, the municipality is interested in knowing who these collaborators are. Specifically, the municipality will want to know how these partnerships are going to be sourced, structured, monitored and controlled.</td>
</tr>
<tr>
<td>Cost structure</td>
<td>The last element to consider is the <strong>cost structure</strong>, i.e. what are the business’ major cost drivers and how are they linked to revenue? In the preliminary meetings, your cost structure and revenue expectations are less relevant for the municipality, or perhaps none of their affair. However, the municipality still needs to obtain some insight into your cost structure in order to fully understand what it is they are buying. In addition, failing to discuss your cost structure with the municipality may be interpreted as a warning sign.</td>
</tr>
<tr>
<td>Cost structure</td>
<td>Lastly, you need to keep in mind that documentation is one of your main sales arguments, and a necessity in minimizing wrong decisions in the municipality. If you lack documentation on how your solution or product can create valuable assets for the municipality, you need to assist the municipality in establishing such documentation, for example through minor tests.</td>
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</table>
Motitech's first product, MOTIview, was developed in collaboration with the municipality of Bergen. MOTIview is a comprehensive video catalogue showing local bike trips in and around the Nordic countries, as well as in Motitech's other markets. The catalogue is easily accessed and used when training on stationary bicycles in e.g. nursing homes and rehabilitation centres. The benefits are well documented – the users bike longer and further. An added social dimension is created when the users talk about the local buildings and landscapes that they pass by. Even dementia sufferers have experienced reminiscence, recalling and talking about familiar sights that they see on the videos.

Motitech’s user-driven approach started with a simple video and several visits to nursing homes in Bergen in order to observe and document the end-user experience. The analysis and understanding that was gained through the testing led to the founding of the company and the development of the product, an app that allows for easy selection of videos. The first license to the video catalogue was sold within only 10 weeks.

Large video catalogue of local bike trips

Rapidly growing Norwegian start-up Motitech has managed to achieve the seemingly impossible. Three years was all it took the company to get sales in four of the five Nordic countries, propelling them to new horizons including Germany, United Kingdom and Canada.

Case 1: Motitech

Conquering the Nordics in three years

At a fair in Sweden, Motitech met MISTEL – a municipal test bed from Västerås in Sweden. This formed the first of many test collaborations with foreign municipalities. In order to expand co-operation with the public sector, Motitech participated in the Nordic Independent Living Challenge Competition, involving all the Nordic capital cities.

Participation in Velfærdens Innovationsdag, an annual fair in Copenhagen in 2015 followed, which in turn took them to the Careware fair in Aarhus, where Motitech was invited to present their solution and ideas. This resulted in new associations and test collaborations with Danish municipalities, which subsequently became Motitech’s first customers in Denmark.

“The contacts, partnerships and networks we’ve built with the public sector thus have been crucial for us moving the business forward”, says Jon Ingar Kjenes, CEO of Motitech. “But we’ve also had to constantly invest the time and resources in doing so”

Close collaboration with customers and users

Motitech either invites municipalities to enter into test collaboration or allows them to try the product out for a demo period. According to Kjenes, closing the sale is much easier when the customers and end-users alike have experienced the benefits of using the product.

“We must be confident that our product is good,” says Kjenes. “But at the same time, we’re always seeking to learn from our collaborations. To learn from our customers, healthcare staff, end-users and so on. There’s always something to learn.”
According to Kjenes, finding the right decision maker in the public sector is not the easiest of tasks:

**Learning from the Motitech case**

Three main themes arise when analysing the journey and rapid growth of Motitech:

**Seek to understand**

– Motitech has focused extensively on understanding its users and the value its product creates. This has not only framed the company’s product development but has made it easier to engage in dialogue with the staff in municipalities, nursing homes and rehabilitation centres. It has provided them with stories from appreciative users – stories that are easily shared with staff in other municipalities. The outcome? A higher changeover from tester to customer.

**Don’t put all your eggs in the same basket**

– Selling to a municipal often takes time. Lots of time. As an example, the presentation by Motitech at the Careware fair in Denmark resulted in meetings and subsequently test collaborations with Danish municipalities. With some of these turning into users more than 1½ years later.

Motitech has tackled this challenge by approaching many municipalities and different countries in parallel and with nurturing their contacts and networks. In this way, many potential customers are pursued at the same time and with many being engaged in smaller test or demo runs of the Motitech product.

**An attitude of collaboration**

– A mix of close dialogue with users and staff, building networks and relationships and actively cultivating these, is part of the success of Motitech. The team is focused on understanding, learning and working together with a strong belief in their product and in the difference it can make for users.

Motitech has actively sought to be involved in public-private innovation and test projects and has had the patience – and resources – to engage in these projects while waiting for them to turn into sales. Motitech also sells their solution using a license model – something that has often resulted in the municipalities’ investment not falling under the tender rules. As such, this has also resulted in faster processes for closing sales.

“We seek participation in test and demonstration projects to build relationships and develop our network in the public sector,” Kjenes explains. “It’s highly beneficial for us to get the municipalities to share their experiences and discuss our product. The test projects are an opportunity to learn about their experience and the strengths and weaknesses of our product.”
CASE 2: EVONDOS

Winning the battle of non-adherence

Non-adherence to medication is an important healthcare consideration that affects health outcomes and often leads to high extra costs for the healthcare system. Many patients, especially the older ones, find medicine adherence challenging. Obtaining the medicine from the pharmacy, remembering to take several medications per day, how much to take and when – these are all obstacles to sticking to the programme. Evondos has a solution to the problem.

Medicine dispensing robots as a service

Evondos has developed a service that enables patients in need of long-term medical treatment to get the right medication at the right time and in the right dosage. The service improves patients’ medical adherence and safety while introducing direct cost savings and quality benefits in healthcare.

“I got the idea for an automatic medicine dispensing robot from my grandmother while she needed regular medication,” says Mika Apell, COO and co-founder of Evondos. “This led to the development of the Evondos service, which combines the medicine dispensing robots and the Telecare System, an alert, messaging and notification service. The system reduces cost and gives caregivers more time to work with their patients.”

Evondos’ automatic medicine dispensing robot is placed in the patient’s kitchen or living room, depending on where they spend the most time. Patients are advised by the robot to take their prescribed medicine and the correct dosage is given. If the medicine is not taken, the home-carer is alerted by means of the wirelessly connected Telecare System.

The customers are public and private entities that are responsible for caregiving services for elderly citizens. From the healthcare point of view, using the Evondos E300 robot and Telecare System is a money-saver, as non-adherence is notorious across the industry for costing the establishment large amounts of money. Physician visits, unnecessary treatments, emergency calls and hospitalisation all increase when medication is neglected.

Entering the fray

Evondos Oy, which was established in 2008, employs 60 people. Its headquarters and assembly plant are located in Salo, about 100 km west of Helsinki.

The company currently operates in four Nordic countries: Finland, Sweden, Denmark and Norway. Evondos has ambitions of expanding into more European and international markets, and with that in mind, their product is CE-marked and manufactured according to a strict quality system.

Evondos believes in in-depth market research before making the decision to enter a new market. The company analyses everything from service providers and home care customers to public procurement processes and technology readiness. According to Apell, going from the planning and preparation stages to actually procuring a sale takes an average of one year.

“Typically, customers want to start using the service by implementing it on a smaller scale to begin with,” says Apell. He adds that a certain number of licences must be taken into use to get an
accurate insight into the benefits of large-scale implementation. During that period, he says, public entities must keep within purchasing limits, and subsequently, if needed, carry out procurement.

Knowing the maturity and size of the market, identifying other market players and facing the challenges of delays in procurement, especially when operating within the public sector, are crucial factors to take into account. Apell also highlights the benefits of utilising resources from national export supporting organizations when expanding operations into other countries.

“Drawing from our experience, I would recommend companies to extend the idea of home market to cover more than one country from the beginning,” he says. “However, it’s also very important to be realistic when you’re evaluating your abilities to go abroad.”
Accessible access

It all started with commercial paper deliveries. The time it took for the distributors to enter the many buildings in order to dispose of their load cost more than investing in new access control technology. BEKEY stepped into the picture to alleviate this problem, and the company’s access control solutions.

An easy way to manage access

“The BEKEY solution that allows you to unlock doors with your mobile phone was a new and innovative solution that didn’t previously exist on the market,” says Søren Holmblad, CEO of the Danish company. “Our solution was an alternative to the traditional keys that had been used for centuries.”

Using Bluetooth technology, registered users, and in this case caregivers, can gain access to designated buildings whenever needed. All it takes is registration to Netkey, BEKEY’s cloud-based key administration solution, downloading the app, installing the BEKEY unit in the building, and distributing access to employees and collaborators.

Within the healthcare sector, ensuring a high level of safety for all the stakeholders involved, such as elderly residents, their families and their caregivers, is paramount. The access control system enables healthcare personnel to spend more time with their patients, even to the point of saving lives when it comes to emergency situations where ambulances are required.

Established in 2008, the company has spread its wings across Denmark, inspiring interest in the Norwegian and Swedish markets, in which it started sales in 2014. Finland followed in 2015. Today, companies and municipalities in Denmark, Norway, Sweden and Finland, as well as in Holland, Switzerland, UK, Japan and USA use BEKEY’s access control systems.

In 2016, a contract with the City of Malmö brought about the implementation of 9000 units with more than 8000 registered users, the largest project within homecare for the firm to date.

Overcoming stumbling blocks

When BEKEY’s solution was introduced to the market, it was not the typical off-the-shelf product that the municipalities had experience in implementing.

“Hence, we made an effort to encourage the municipalities to change their traditional workflows and selection processes,” says Holmblad. “This inspired them to look at the benefits of using the solution from BEKEY.”

An important part of the company’s go-to-market strategy involves identifying the relevant municipal decision makers, which is not always as easy as it sounds. This could be an Elderly Care Manager, an Economy Director or a welfare technology innovation consultant, and even the Mayor or other political authorities could hold the key to closing the deal. Often, decisions are made in close collaboration with citizens and home carers.

Operating in the public sector means that companies have to expose themselves to competition and become good at participating in public procurement processes.
“A strategic approach to tendering requires that the company establishes an internal tender-team that masters the art of describing the right combination of services and correct pricing,” says Holmblad. “This may take time, but it has the distinct advantage of ensuring that your contracts span a number of years.”

Navigating the Nordics

Analysing the market, identifying interesting partners and finding companies that might be an attractive match for your merchandise is how BEKEY has gained contracts with e.g. Swedish Interphone and construction firm Enemærke & Petersen, as well as cities, boroughs and regions across the Nordic countries.

The ageing population is a pressing issue in societies today with more and more people having to care for themselves in their own homes. Taking concrete action by attending welfare technology fairs, BEKEY has met with potential partners and gained insights into the efficacy and value of their solutions.

Holmblad explains that while Nordic countries are similar to one another, there are nuances in the ways and means that the home care industry is organised that have to be taken into account. In Sweden, for example, effort registration is highly prioritised, i.e. a registration of what exactly has been done for each citizen.

“The Nordic market is without doubt an attractive one due to its purchasing power,” he says. “Innovative products are recognised and create savings, a factor that the public sector is always interested in. Conditions are ripe for economies of scale and therefore also for public-private collaboration.”
**CASE 4: CAMANIO CARE**

**Bikes, giraffes and dinners**

You may well wonder what these have in common? Camanio Care can explain. The company believes that people of any age or physical function should be entitled to dignity in the way they move, feed and enjoy themselves, and develops advanced robot technology and assistive aids to achieve this vision.

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**Robots that improve quality of life**

Camanio Care is a young outfit with roots in established firms. It was founded in 2016 when two companies, Brighter Two (jDome) and Bestic, joined forces.

Camanio Care’s products include Bestic, a small, easy to-operate robotic feeding assistant, which allows users with physical disabilities to feed themselves rather than having to rely on others when enjoying their meal. The user controls the robot’s pace with a touchpad, allowing for a more independent, comfortable and social eating experience. The Giraff Care Robot, another of the company’s products, is a device that alleviates the stress of solitude in home-care patients. The movements of the Giraff can be remotely controlled by e.g. a caregiver or a family member, enabling them to move around in the home and talk to the person by the means of a screen perched on top.

Bestic and the Giraff Care Robot were developed with support from Robotdalen, a Swedish catalyst for the development and implementation of new solutions in robotics in healthcare, industry and service.

“Working with Robotdalen has provided invaluable input with regards to product development, production and sales,” says Catharina Borgenstierna, CEO of Camanio Care. “It’s been beneficial for us to be part of Robotdalen’s network and collaborating with the other companies.”

Borgenstierna mentions BikeAround, a product that creates an interactive biking experience for the users, as an example of yet another invention that increases the quality of life of patients. A special screen, formed as a dome, provides a realistic and panoramic 3D effect while the patient cycles on the stationary bike. The efficacy of this biking experience takes dementia and stroke patients for a stimulating ride down memory lane while they pedal in a safe and sound environment. The benefits are both physical and cognitive.

**Crossing borders**

Camanio Care currently employs 16 people that work with development, production, sales and marketing. Their backgrounds are diverse in that some have specific needs, while others are healthcare professionals and researchers. Moreover, the ever-expanding field of robotics requires the company to collaborate with universities and research institutions around the world to create solutions and apps for users and professionals.

Today, the company’s products are available in all Nordic countries, in Europe as well as in the US, China and Australia. Most of the products are sold to centres for assistive aids and directly to the municipalities in Northwestern Europe and the Nordics. In other countries, distributors are used.

Working within the healthcare industry is a challenging business at the best of times, not to mention operating in foreign climes.
“The secret of being able to reach new markets is to work locally,” says Borgenstierna, who emphasizes the importance of using local consultants as well as professionals that can aid the company in making the move. Understanding the local compensation system and who or which department makes the payment, she says, is specific to every case.

“One quickly becomes aware that it’s like starting with a white paper in each new country.”

Welfare technology is perceived differently in the different Nordic countries. While the Nordics in general are tech savvy and understand the value of these new products, each country has its own obstacles to overcome. As an example, Norway has many small municipalities and hence, a lack of funds in certain places, while scepticism towards robotics in healthcare has been observed in Finland.

“Denmark is our best country,” says Borgenstierna. “This is due to the fact that one of the areas prioritized by the state is assistive aids for eating.”

Catharina Borgenstierna and her coworkers at Camanio Care are passionate about sustainability and growth. They are striving to build a strong, long-term and profitable company that is a world leader in welfare technology and the future of care. Recently, the company has taken several major steps towards this vision, and is now ready to meet future needs in health care in Sweden and across the globe.
Breaking records is nothing new for Icelandic orthopaedics company Össur. Established in 1971 by Össur Kristinsson, a prosthetic user himself, the company now has a global presence with 2300 employees, subsidiaries all over the world and a string of acclamations to boot. Össur first focused on the domestic market and then began to export in 1986.

Unique prosthetics sold through local partners

Össur is a leader in non-invasive orthopaedics and has to date obtained more than 1,000 patents. The company’s prosthetic solutions include the world’s first bionic lower limb, SYMBIONIC LEG, a solution for young and old amputees alike. The company recently expanded into upper-limb prostheses with the acquisition of Touch Bionics in 2016 for a sum of €30,8 million. The prosthetic hand is controlled by means of a mobile app that manipulates each finger independently. In the field of braces, Össur has developed osteoarthritis solutions, one of which is the Unloader One, a knee support alleviating pain associated with the condition.

Guðjón Kárason, CEO of Össur Nordic AB, is well versed in the operations of doing business across borders, something Össur has been doing since the early 90s when the company entered the Nordic market for the first time. The company’s model is to develop, manufacture and sell products directly to the paying entity, and thus having a direct connection to buyers and users alike has proved to be a strength.

The route Össur chooses is to partner up with a local company with established sales channels. Networking, negotiations and careful evaluation are all key to successful matching of international collaborators with whom Össur is willing to establish a long-term relationship.

Kárason emphasizes the fact that the product has to be unique. It has to offer something that hasn’t been available before and that can benefit and add value to the user-experience.

“In spite of the differences in regulations and decision-making from country to country, the product has to be in the ‘must-have’ category for a particular field,” he says.

Getting to know ‘scholars’ such as university professors, educators and leading doctors gives insight into the needs and requirements of patients, as well as the culture of healthcare as a whole, according to Kárason. Extensive support and strong cooperation with the partners distributing the products to the paying customers has also been a successful strategy of the company.

Hopping over hurdles

Össur has had its own set of challenges. Traditional ways of doing things and strong personal opinions on behalf of leading personnel towards new solutions have stood in the path of establishing trade partners. Hence, Kárason reiterates the danger of failing to choose the right fit for your company; the people who will best suit your methods of operating.

Each Nordic country has its own rulebook but the key factor that stands out is financing. Finding out who’s who when procurement decisions have to be made is a challenge all of its own, which brings one back to the importance of choosing the right
partners. Who can point you in the right direction and introduce you to crucial players in the markets you would like to break into?

However, Kárason adds, “Iceland has a rather positive image, which can help a lot in the early stages, and in general, we feel that we’ve been helped by the fact that we’re a Nordic company.”

First across the line
Some words of advice from Guðjón Kárason:

“Make sure that the solution being offered brings something more than already exists, especially in forms of benefits for the patient. Choose eventual partners with great care. Be patient and prepared for things to take time. Work out who the key influencers are and identify decision makers in each area in order to ensure that the right persons are being addressed and involved.”

And by the way: perseverance, patience and hard work won’t go amiss.
Appendix
Overview of Iceland, EEA membership, counties and municipalities

Iceland is not a member of the European Union (EU). Hence, Iceland’s relation to the European Union is governed mainly by the agreement on the European Economic Area (EEA), which came into effect in 1994. The EEA Agreement facilitates cooperation between the EU member states and the three EFTA EEA states (Iceland, Liechtenstein and Norway), uniting them into a single market governed by the same basic rules (Acquis Communautaire).

Iceland has fully implemented the Schengen Agreement, which ended internal border checkpoints and controls, since 25 March 2001. Citizens of countries implementing the Schengen Agreement can cross the internal borders of the implementing countries at any point without being subjected to passport checks.

The integration of Iceland’s health institutions has been carried out in accordance with the country’s division into eight health districts (cf. Health Act nr. 40/2007). As of 1 October 2014, there is a health institution in each district. Landspitali University Hospital is in the capital region (1), and Akureyri Hospital is in region (6). The primary purpose of this integration is to ensure that health services are available in all regions, both professionally and financially, and to eliminate small regions, where only a few doctors are employed. The objective is also to reduce the load of monitoring, binding commitment and isolation as well as to create stronger operational and administrative units. In 2016, a new formula funding financing model will be implemented in primary health care in the capital area. The funding will be based on the size and characteristics of the population. The goal is a transparent financing model, linked to written requirements for all primary health care centres, both public and private.

Organisation of the health care system

The Icelandic health care system is based on a relatively centralized organisation. The main principles are as follows:

The Parliament is responsible for legislation, but the Minister of Health, who is responsible for health care policy in the Ministry of Welfare, is responsible for regulation, supervision and guidelines. The Minister of Health has responsibility for ensuring that all citizens in Iceland have access to optimum health services (primary, secondary and tertiary).

The regional health care institutions are responsible for providing health services. Health centres provide primary health care services, which comprise both prevention and general treatment. Preventive measures include antenatal care, infant health care, school health programmes, immunization, family planning, etc. Home nursing care is also provided by the health centres, while home help services are provided through the municipal social service system.

As a rule, initial contact should be made at the primary health care centres. However, patients can go to specialists and dentists, and they can contact emergency and ambulance services without a referral. Specialist medical treatment is carried out largely by practising specialists who work under a contract with the State health insurance. Specialists operate mainly in densely populated areas, but they also visit some rural health care centres. Specialist treatment is also offered in outpatient wards in hospitals.

Hospital services are provided in three types of facilities: 1) specialized hospitals, 2) regional hospitals with some specialization, and 3) a number of local health care facilities with a few hospital beds but with more long-term beds for elderly people, these hospitals operate to a large extent as nursing homes.

Dental treatment is provided by private dental practices. Physiotherapy services are provided in health centres, but treatment in urban areas is provided mainly by private physiotherapists. Private physiotherapists have a contract with the State health insurance.

Most nursing homes are independent institutions, run by municipalities, voluntary organisations and the like through an agreement with the State health insurance. They are financed partly by user charges, but mainly by health insurance.
According to law, occupational health services are the responsibility of the employer. Large companies purchase these services from practising physicians, consultancy firms, or from health centres. Pharmacies are managed by the pharmacy owners. Municipalities have the right to comment on the location of pharmacies, but the Medicine Agency regulates their functions.

Supervision of health services and health care personnel

The Directorate of Health (DoH) is a government agency headed by the Director of Health. The Directorate of Health carries out supervision of health institutions, health care personnel, prescription of pharmaceutical products, measures for combating substance abuse and control of all public health services.

The principal role of the DoH is to promote high-quality and safe health care for the people of Iceland, health promotion, and effective disease prevention measures. Its activities are set out in the Medical Director of Health and Public Health Act, No. 41/2007, as well as in other provisions of law and regulations.

The Icelandic Medicines Agency (Lyfjastofnun) carries out advisory and supervisory tasks regarding pharmaceutical products to pharmacies, pharmaceutical companies and the public.

Good to know about the Icelandic health care

The state, the municipalities, county councils and regions may procure services from private companies. This is quite common. Privately managed providers financed from tax revenue must offer the service concerned to citizens on the same conditions as those that apply to a similar public service.

The National Agency for Public Procurement, Ríkiskaup

The National Agency for Public Procurement has overall responsibility for developing and supporting the procurement carried out by the contracting authorities and entities. Their task is to work for an effective and socially and environmentally sustainable public procurement to the benefit of the society and to the participants in the markets. The Agency provides support to contracting authorities, entities and suppliers.

The Icelandic Data Protection Authority, Persónuvernd


The purpose of the Act on the Protection and Processing of Personal Data is to ensure that personal data is processed in conformity with the fundamental principles of data protection and the right to privacy. The Act applies to any automated or manual processing of personal data if it is, or is intended to become, a part of a file.

The decisions made by the Icelandic Data Protection Authority are final and may not be brought before any other administrative authority. However, the decisions can be contested in the courts, and complaints concerning the administration of the Data Protection Authority can be addressed to The Parliamentary Ombudsman. The Icelandic Data Protection Authority exercises surveillance over processing of data to which the act applies. With proper identification and without a court order, the staff of the DPA must be admitted to any and all premises where personal data is being processed.

The authority deals with specific cases on the basis of inquiries from public authorities or private individuals, or cases taken up by the Authority on its own initiative. Persons domiciled abroad may also obtain assistance from The Icelandic Data Protection Authority (requests should preferably be made in Icelandic or English).

The Data Protection Act requires that the opinion of the Data Protection Authority must be obtained prior to passing new laws, orders and regulations concerning the protection of privacy.

Since the new Act entered into force, the DPA has issued some public guidelines and regulations. Among others are rules on how to obtain informed consent, rules concerning notification of processing of Personal Data, rules concerning security assessments and systematic safety measures. None of the public guidelines...
regulations have yet been translated into English. Pursuant to the Act on Processing of Personal Data, the Ministry of Justice has issued a statutory order concerning credit information agencies. The Regulation on Credit Reporting, No. 246/2001 was issued on 13 March 2001 by the Ministry of Justice and entered immediately into force. This regulation has not been translated into English.

**About Central Public Procurement, Ríkiskaup**

Ríkiskaup (Central Public Procurement) operates under the auspices of the Ministry of Finance. Ríkiskaup administers procurement of supplies and services in domestic and foreign markets for state institutions and state corporations. In this capacity, Ríkiskaup examines joint needs for supplies and services and endeavours to co-ordinate procurement through framework agreements. Ríkiskaup also provides commercial assistance and instructions concerning individual procurement as needed. Ríkiskaup gives consultation, manages the selling and purchasing of state property and collects information about the procurement needs of the state institutions and state corporations.

Since May 2013, a new reimbursement system for medicinal products has been implemented, similar to the Danish and Swedish systems. The main goal of the new system was to increase equality between individuals, regardless of health status, and to make the health services more efficient.

**Icelandic Association of Local Authorities, Samtök íslenskra sveitarfélaga**

The Icelandic Association of Local Authorities is the forum for co-operation between the local authorities. It was established in 1945 by 52 local authorities; since 1973, all local authorities in the country have been members of the association. The Brussels Office of the association safeguards the interests of Icelandic local authorities vis-à-vis the European Union and in the EEA co-operation, and it also facilitates the participation of municipalities in European programmes. Iceland's local authorities function under the Local Government Act, No. 138/2011. While the specific tasks of the local authorities are defined in various items of separate legislation, the Local Government Act sets out their rights and obligations.

Under the revised Local Government Act, (No. 138/2011, entered into force on January 1 2012), the Association of Local Authorities in Iceland is the joint representative of the country’s local authorities. It defends their interests in dealings with the government and other parties, both in Iceland and abroad. It formulates common policy on specific issues and thus works closely with the government and the Althing (parliament). A special co-operation agreement between the association and the government contains formal provisions covering relations between them, read more here.

**Other organisations playing a role in the health sector**

**Icelandic Standards, Staðlaráð**

Icelandic Standards (IST) is the national standards body of Iceland. It is an independent association whose role, by law, is the publication of Icelandic standards and the representation of Iceland in international and regional standards bodies. Four sector committees operate under the auspices of Icelandic Standards: BSTR covering the building sector, FIF for the fishing sector, FUT for the information technology sector, and RST for the electro-technical sector. IST is a member of the European standards organisations CEN, CENELEC and ETSI and of the international standards organisations ISO and IEC.

**SI – the Federation of Icelandic Industries**

The SI is the leading Icelandic employers’ organisation. The purpose of SI is to make business more effective, increase collaboration between employers and clarify the role of each member. The SI is by far the largest member organisation of The Confederation of Icelandic Employers (SA). Within the health care sector, SI promotes policies for companies, institutions and the public to increase their domestic and foreign cooperation regarding development and marketing.

**Innovation Center Iceland**

Innovation Center Iceland is an R&D and business support institute. Focus is on increasing innovation, productivity and competitiveness of Icelandic business by carrying out technology research and diffusing knowledge. Innovation Center Iceland also focuses on supporting entrepreneurs, start-ups and SMEs; amongst others through an Incubator Center offering support and facilities to start-up companies working on innovative business ideas.
Overview of Sweden, counties and municipalities

Sweden has been a member of the EU since 1995. At national level, Sweden is governed by the Government (Regering) and the Swedish Parliament (Riksdag). The Government is supported by ministries and authorities. Parliamentary elections in Sweden are held every four years. Parliament elects a Prime Minister who in turn forms a government.

At regional level, Sweden is divided into 20 counties/regions. Political tasks at this level are carried out by the county council, which is directly elected by the county’s population, and by the county administrative boards, which are the government bodies in the county.

At local level, Sweden is divided into 290 municipalities. Each municipality has a municipal council, whose members are elected by the population and makes decisions on municipality matters. The municipal council elects a municipal board, which manages the municipality’s affairs.

For contacts and information about all Swedish municipalities and county councils

The division of responsibilities in the health sector

There is no hierarchical relation between Sweden’s municipalities, county councils and regions, since all have their own self-governing local authorities with responsibility for different services. The possibility of decision-making based on regional and local conditions, known as ‘local self-government’, is enshrined in the Swedish constitution. Since this local self-government makes it possible to design services in a range of ways, it is easier to find flexible solutions that are suitable for a particular municipality, county council or region. On the other hand, this means that as an entrepreneur, you must contact each individual municipality, county or region where you might want to introduce your product.

The counties or regions are responsible for the health care at hospitals and local health centres. The municipalities are responsible for elderly personal care, i.e., giving or assisting people the help they need to cope with their everyday lives. Social elderly care can be conducted in both private homes and in sheltered housing. In sheltered housing, the municipality is also responsible for health care – up to nurse level. If assessment or treatment by a medical doctor is needed, responsibility goes to the counties/regions. Some municipalities are also responsible for certain home health care services. Interventions can be carried out by persons who are employed by the municipality or by private providers on behalf of the municipality.

All social care and assistance must be approved in accordance with the Social Services Act (Socialtjänstlagen).

Read more about the Social Services Act here

Financing of health interventions

Health interventions are financed by taxes, state funding and custom fees.

The custom fees constitute only a small part of the total financing. Each municipality and county council decides its own level of the custom fees. In Sweden, only a small part of the population has private health insurance. It is only private health care providers that give that kind of care.

Assistive aids

Assistive aids activities are governed by the Health Care Act (Hälso- och sjukvårdslagen) and organized based on disabilities. Assistive technology services are also organized on the basis of areas that compensate these impairments. The responsibility is shared between the respective health authorities of the county, region and municipality. The health authorities are obliged to offer tools that individuals feel they need to function in their environment or for care and treatment.

Most assistive aids are prescribed by physiotherapists and occupational therapists working under the municipalities and county councils.
Prescribing and handling of assistive aids, which are mostly medical devices is regulated by the National Board of Health and Welfare (Socialstyrelsen) and the Medical Products Agency (Läkemedelsverket). If your product is or will be used as a medical device – you will find valuable information about CE-marking on the website of the Medical Products Agency.

Read more about the National Board of Health and Welfare
Read more about the Medical Products Agency

Good to know about the Swedish health care

All purchases made by public organisations (state agencies, the county councils/regions and the municipalities) are governed by the Swedish Public Procurement Act (2007:1091 – LOU). The act is based largely on the EU Directive concerning public procurement.

Read more about the rules for procurement

At present, Sweden has no national website showing all Swedish public tenders.

Municipalities, county councils and regions may procure services from private companies. Privately managed providers paid out of tax revenue must offer the service concerned to citizens on the same conditions/quality as those that apply to a similar public service. In Sweden, about twenty per cent of elderly assistive care (social care) in both private homes and in sheltered housing is carried out by private companies.

The National Agency for Public Procurement – Upphandlingsmyndigheten

The National Agency for Public Procurement has overall responsibility for developing and supporting the procurement process as carried out by the contracting authorities and entities. The Agency’s task is to work for an effective and socially and environmentally sustainable public procurement system that benefits society and the participants in the markets. The Agency provides support to contracting authorities, entities and suppliers.

Read more about the National Agency for Public Procurement

The Swedish Data Protection Authority (DPA) – Datainspektionen

The DPA is a public authority charged with protecting the individual’s data privacy without unnecessarily preventing or complicating the use of new technology. The DPA ensures that authorities, companies, organisations and individuals respect:

- The Personal Data Act (1998)
  – Personuppgiftslagen
- The Data Act (1973)
- The Debt Recovery Act (1974)
- The Credit Information Act (1973)

The DPA works to prevent encroachment upon privacy through information and by issuing directives and codes of statutes. The DPA also handles complaints and carries out inspections. By reviewing government bills, the DPA ensures that new laws and ordinances protect personal data in an adequate manner. For example, if your product or services involves personal data or a camera, it is best to consult the information on the DPA website.

Read more about the Swedish Data Protection Authority

If your product or services involves personal data, you can obtain valuable information about the Swedish rules here

Other useful organisations

The Swedish Association of Local Authorities and Regions (SALAR) – Sveriges Kommuner och Landsting

SALAR represents Sweden’s 290 municipalities and 20 county councils/regions to the government, public sector employees and to the private sector. SALAR is thus both an employers’ organisation and an organisation that represents and advocates for local government in Sweden. Membership is voluntary, but all Swedish municipalities, county councils and regions are members. SALAR concludes central collective agreements with groups of public employees, promotes their role as employers and creates conditions for local solutions. They also represent and advocate for local government by raising issues, lobbying and enlightening public opinion. SALAR also works actively with e-health issues.

Read more about SALAR

The Health and Social Care Inspectorate – Inspektionen för vård och omsorg (IVO)

The Health and Social Care Inspectorate (IVO) is a government agency that conducts supervision of social services, health care and for people with disabilities,
activities under the Act on Support and Service for Persons with Certain Functional Impairments (LSS), and supervision of health care professionals in their professional activities.

Read more about The Health and Social Care Inspectorate

The Swedish Standards Institute – SIS
Through SIS, you can participate, network and influence the standardization process and also gain access to standards.

Read more about SIS here

Business Sweden
Business Sweden’s aim is to promote Sweden internationally and to enhance the image and awareness of Sweden as an attractive, innovative and competitive business partner. Whether you are interested in accessing leading technologies or entering the market, Business Sweden helps foreign companies establish or expand business operations in Sweden.

Read more about Business Sweden here

Swedish Medtech
Swedish Medtech is the Association for Medical Technology in Sweden. Its member companies include both manufacturers and distributors. As an association, Swedish Medtech strives to ensure that the medical technology industry has the best possible opportunities to bring new innovations into healthcare use, to develop available products and services and to expand in the Swedish market. Improving business conditions for their member companies is therefore one of Swedish Medtech’s primary areas of activity.

Read more about Swedish Medtech

Fairs and conferences

MVTe
– Mötesplats Välfärdsteknologi och E-hälsa is a conference and trade show on the introduction of new technology in municipal healthcare and social services. If we take the needs and circumstances of the individual as our starting point, welfare technology leads to increased independence, security and participation in society. Some municipalities are already at the cutting edge in using technology in healthcare and social services, while others are at the starting line. MVTe offers opportunities and resources that can benefit all levels. The conference is an annual event in Stockholm.

Read more about MVTe here

Vitalis
– a large eHealth event in Gothenburg. Vitalis attracts more than 3600 attendees, with the shared aim of building their knowledge and improving tomorrow’s health care. Vitalis is a venue for a diverse group of stakeholders – municipalities, counties, authorities, companies and academia – to meet and discuss future challenges and solutions in health care.

Read more about Vitalis here

Leva och fungera
– This is Scandinavia’s largest and most established exhibition of assistive technology products for enhancing the life of people with physical disabilities. Leva och fungera is a forum for exchanging knowledge and highlighting new developments in this growing market.

Read more here

Arctic Light E-Health Conference – ALEC
An opportunity to connect with peers to discuss digital solutions to better health for all during two days of inspiration, networking and skill development.

The conference is held in Luleå, a major IT hub, in the northern part of Sweden.

Read more here
Overview of Denmark, regions and municipalities

Denmark is divided into 5 regions financed partly by a tax levied by the central government and partly by their constituent municipalities. The region’s most important task is public health services, owning and running hospitals throughout the country, as well as determining the number and locations of general practitioners. Apart from the regionally run hospitals, Denmark also has a few privately run hospitals – accounting for less than 1% of the hospital beds.

The Danish regions were created by the 2007 Danish Municipal Reform, where the five regions replaced the former 13 counties (amter). At the same time, the number of municipalities (kommuner) was reduced and consolidated, from 270 to 98. The 98 municipalities vary in sizes, with seven having less than 20,000 inhabitants and 36 having more than 50,000 inhabitants. The municipalities are responsible for all areas of social and public welfare, including schools, daycare and kindergartens, job training for unemployed citizens, home care, physical training, housing for the elderly and disabled, city planning and development, etc. The primary revenue of the municipalities comes from income and property taxes, with the level of the local tax varying from one municipality to another. However, in addition to their own taxes, the municipalities also receive annual grants from the government.

Organisation of health interventions

As a result of the local government reform, municipalities have been assigned a wide range of health services, such as rehabilitation, home care, nursing homes, health care, post-natal visitation of new mothers, treatment and prevention of alcohol and drug abuse, dental care, as well as health promotion. Danish municipalities have now become much more involved in health care, with major responsibility for measures supporting a healthy life, both in terms of prevention and in terms of rehabilitation. In cooperation with local doctors and other health institutions, the municipalities are responsible for providing information to citizens on healthy lifestyle, avoidance of type-2 diabetes, stop smoking campaigns, etc. The additional tasks also include financing of these activities, and municipalities in Denmark now have direct co-responsibility for their citizens’ use of hospital services.

Municipalities are also responsible for home care, as part of their enhanced role in reducing/preventing hospitalization. This stronger focus is supported by an incentive mechanism in which the municipalities share part of the cost of hospitalization with the local region, so that effective home care can help reduce/prevent re-hospitalization.

Additional information about the Danish health care system

The Danish public health care system is organised in two main sectors: primary health care – administered by the municipalities – and the hospital sector (or secondary sector), administered by the regions. The primary health care sector deals with general health problems and care as well as preventive health schemes and dental care for children. The hospital sector deals with medical conditions that require specialised treatment and intensive care. A general practitioner (GP) must refer the patient to a hospital for examination and treatment unless it is a question of an accident or acute illness (in which case the citizen can contact the emergency services). The GPs occupy a central position in the health care system, being the primary point of entry to health services in the hospitals. The GP is therefore both the entry point that gives the patient access to treatment and is at the same time the person with responsibility for referring patients to hospitals, specialists and other healthcare professionals. Most GPs are private, but they enter into contracts with their local region and receive reimbursements from the state on services provided to their clients.
For the primary sector, the municipalities are supported by Kommunernes Landsforening (KL), the national advocacy organisation of Danish municipalities. While membership in KL is voluntary, all 98 municipalities are members. KL promotes the common interests of the municipalities, provides individual municipalities with consultancy services and ensures that all members are provided with up-to-date and relevant information. On welfare technology KL, together with Danish Regions and the government, has launched a common strategy on digital welfare. This strategy includes the implementation throughout all the municipalities of technologies in four specific areas: ceiling lifts, feeding utensils (robot-aided feeding solutions), washing toilets, and better use of assistive devices. Technologies within these areas have been deemed as being sufficiently developed so that implementation throughout the municipalities would be economically viable. KL supports this implementation by various tools, sharing of practices and information. At the same time, large-scale tests of other types of technologies are taking place, a process which might pave the way for an updated strategy with new implementation goals. Tests are also being run on digitally supported rehabilitation devices.

Municipalities and regions may procure services from private companies. In municipalities, for instance, this is carried out via private home care offers as part of the ‘fritvalgsordning’ (free-to-choose scheme). Under this arrangement, citizens may choose among providers for their home care services. The municipality is typically one of these providers, while the others are private companies. Home care area is a bit special compared to other local services because the local council cannot decide themselves whether the job should be carried out by a private provider or not. Rather, the citizen must be presented with the choice.

On public procurement
Annually, the Danish public sector procures goods and services for around 300 billion DKK – roughly equivalent to 40 billion Euros. Procurement is organized in a variety of ways, with some tasks being under centralized management and procurement agreements while others are managed solely by individual departments within, for example, a municipality. In January 2016, Denmark obtained a new Public Procurement Act in line with the applicable EU legislation. For the health- and care sector, the new legislation requires a public tender for purchase of services and goods over 1.5 million DKK (€200,000). For orders below this threshold, there is no formal requirement for a public tender process, but the procurer has to ensure that the procurement process is carried out on market conditions (e.g. obtaining offers from three potential suppliers).

The new Danish Public Procurement Act is available in English here

All public tenders are shown here
They provide an overview of national tenders, EU procurement and government procurement plans. It is possible to search for tenders and to set up search queries that alert you when new tenders fitting your search query is published.

Staten og Kommunernes Indkøbsservice (SKI) is the organisation in charge of centralising the public sector’s procurement needs. SKI organizes framework agreements with suppliers on specific goods or services. For example, municipalities in need of these types of goods will normally order them via the framework agreement. The focus of SKI is on standardized goods (e.g., furniture, diapers, pens, hardware and software). SKI is jointly owned by the Danish state and KL (the interest group and member authority for the Danish municipalities).

Read more here

Organisations that might be of assistance
Welfare Tech
is a Danish national cluster and hub for innovation and business development in health care, home care and social services. Welfare Tech is a membership organisation whose members come from the private sector, public organisations, and research and education institutions. Welfare Tech holds conferences, seminars and workshops that bring together start-ups, companies and public institutions interested in health and care solutions.

Read more here

Healthcare DENMARK
is a nationally supported organisation that promotes Danish healthcare excellence. Healthcare DENMARK organizes and coordinates delegation visits for foreign decision-makers and press delegations to Denmark – as well as promoting Danish companies and products internationally, at exhibitions, fairs, conferences, etc.

Read more here
Copenhagen Healthtech Cluster
A cluster covering the Zealand/Greater Copenhagen area. It is coordinated by Copenhagen Capacity (the official organisation for investment promotion and economic development in Greater Copenhagen) and can assist with facilitating partnerships with regional and municipal actors in the Greater Copenhagen area as well as with information and advice on how to set up a business in Denmark.

Read more about Copenhagen Healthtech Cluster here
Read more about Copenhagen Capacity here

Fairs and conferences

CareWare
– annual fair held in March or April in Aarhus, Denmark’s second largest city. Focuses on new technological solutions for social, health and rehabilitation. Attended mostly by public sector representatives with some companies presenting their innovative products and projects. Mostly in Danish.

Read more here

Health and Rehab Scandinavia
– bi-annual fair. Organized by the Danish Rehabilitation Group, this trade fair focuses on healthcare and welfare technology, rehabilitation, assistive technology, rehabilitation services as well as care and hospital equipment. This is a traditional trade fair with manufacturers and suppliers exhibiting their different products. Attended by public sector representatives as well as end-users. The most recent fair, was attended by nearly 9000 persons.

Read more here

Week of Health and Innovation (WHINN)
– an annual event in October in the city of Odense, in southern Denmark (roughly 1½ hours by train from Copenhagen) highlighting the latest in health and innovation. WHINN is a week that brings together different institutions and organisations within the health care sector. It is several days with many different events, seminars, conferences, workshops, exhibitions, matchmaking events, etc. Several events are held in English. Last year WHINN had more than 1200 attendees.

Read more here
Overview of Norway, counties and municipalities

Although Norway is not an EU member state, it is closely associated with the Union through its membership in the European Economic Area (EEA). The European Union plays a significant role in European health cooperation, and through the EEA Agreement, Norway is involved in a variety of EU activities. A large number of EU directives are implemented in Norway. As such, Norway’s trade is dominated by the EU.

The country is divided into 19 regional authority areas, counties (‘fylker’), which are in turn sub-divided into more than 420 local municipalities (‘kommuner’). In 2015, a reform took place that reduced the number of municipalities. Although Norway is a unitary state, the county councils and local authorities have a great deal of political autonomy. At the regional level, political tasks are carried out by the county council, whose members are directly elected by the county’s population, and by the county administrative boards, which are the government bodies in the county.

At the municipality level, each municipality has a municipal council, which is elected by the population and makes decisions on municipality matters. The municipal council elects a municipal board, which in turn manages the municipality’s affairs.

Organisation of health interventions

Norway has a combination of market economy and a Nordic welfare model, with universal health care and a comprehensive social security system. The state is governing power over the entire country, while the counties and the municipalities decide locally and have autonomy in certain areas. There is no hierarchical relation between municipalities, county councils and regions. Rather, each has their own self-governing local authorities with responsibility for different services. The possibility of decision-making based on regional and local conditions, known as local self-government, is enshrined in the Norwegian constitution. Since local self-government makes it possible to design services in a range of ways, it is easier to find flexible solutions suitable for a particular municipality, county council or region. On the other hand, this means that as a firm trying to introduce your product, you will have to contact each municipality, county or region individually.

The counties/regions are responsible for the ‘specialist services’, such as hospital and clinical care. The municipalities are responsible for the ‘primary service’, such as GP-based health care, social services for the elderly, and personal assistance for those needing help to cope with their everyday lives. The social care for the elderly can be carried out in both private homes and in sheltered housing. In sheltered housing, the municipality are also responsible for health care. Some municipalities are also responsible for certain home health care tasks. Social services, such as home care visits, can be carried out by staff employed by the municipality or by private providers under contract to the municipality. The municipality’s responsibility for health services is legislated in the law on municipal health care.

Assistive aids

The Norwegian Board of Health Supervision is the national supervisory authority on all matters related to health. The office had about 115 employees in 2013, with lawyers, doctors, health care personnel, professionals within the fields of child welfare, social work and social scientists.

At the local level, each community can decide on how their housing support services should be organized. The community is responsible for ensuring provision of assistive aids and to provide support for a suitable dwelling environment for the resident. Traditionally, occupational therapists and physiotherapists decide and implement the specific assistive aids and facilitate adaptation measures of the dwelling environment. It is important that they cooperate with other agencies in the community who are knowledgeable about building conditions. Changes in construction required by the assistive solution, and the economic costs, must be viewed in context.
At the national level, the Department of Assistive Technology (NAV Hjelpemiddelsentralen) has overall and coordinating responsibility for assistive aids for the disabled in their county, and is a resource centre for public bodies and others who are responsible for solving disabilities issues. Professionals at NAV have knowledge about disabilities, user needs and housing adaptation and can advise in the selection of functional solutions and customize various aids for use in and outside your home.

Read more here

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Read more here

Prescribing and distribution of assistive aids, which are mostly medical devices, are regulated by the Norwegian Board of Health Supervision and the Norwegian Medicines Agency. If your product is or will be used as a medical device, you will find valuable information about CE-marking on the website for the Medical Products Agency.

Read more about
the Norwegian Board of Health Supervision
Read more about the Norwegian Medicine Agency
Read more about assistive technology in Norway

Good to know about Norwegian health care

Municipalities, county councils and regions may procure services from private companies. Privately managed providers must offer the service concerned to citizens on the same conditions and at the same level of quality as a similar public service offering.

The National Agency for Public Procurement

The National Agency for Public Procurement has overall responsibility for developing and supporting the procurement carried out by the contracting authorities and entities. The Agency’s task is to work for an effective and socially and environmentally sustainable public procurement to the benefit of the society and market actors. As such, the agency provides support to contracting authorities, entities and suppliers.

Read more about procurement in Norway

The National Publication Database

Doffin is the Norwegian online database for announcements of public procurement and procurement in the utilities sector (water, energy, transport and telecommunications) that are subject to EEA regulations.

Read more here

The website helps clients create and publish notices in accordance with the regulations and enables suppliers to find announcements of public procurements at either local or national level, as well as relevant competitions in the public sector.

The Norwegian Data Protection Authority

The Norwegian Data Protection Authority is a public authority. Its task is to protect the individual’s privacy in the information society without unnecessarily preventing or complicating the use of new technology. It works to prevent encroachment upon privacy through information and by issuing directives and codes of statutes. The authority also handles complaints and carries out inspections. By examining government bills, the DPA ensures that new laws and ordinances protect personal data in an adequate manner.

Read more here

The Norwegian Directorate of eHealth

The Norwegian Directorate of eHealth (Direktoratet for e-helse) is a subordinate institution of the Ministry of Health and Care Services (Helse- og omsorgsdepartementet). The e-Health Directorate is responsible for national steering and coordination of eHealth through close cooperation with regional health authorities, local authorities, technical organisations, and other interested parties. In the context of municipalities, this includes recommendations on the welfare technology area through reports, guidelines on strategies, measures, norms and standards.

Read more here
About The Norwegian Association of Local and regional Authorities – KS

KS is the employers’ association and interest organisation for municipalities, counties and local public enterprises in Norway. All of Norway’s 429 municipalities and 19 counties are members, as well as approx. 500 public enterprises. KS has 260 employees in its head office in Oslo as well as in eight district offices. In collaboration with the Norwegian Directorate of eHealth and the Agency for Public Management and eGovernment (Difi), KS is implementing a national program for welfare technology that will contribute to welfare technology becoming an integral part of health and care. The main objectives of this program are to provide people confronting health challenges the confidence to be able to remain in their own homes as long as possible, and to give them resources to master their own life and health. Its main tasks are to develop and test welfare technology solutions in municipalities and to ensure knowledge creation and sharing of welfare technological solutions.

Fairs and conferences

Faglig Forum
– a bi-annual fair. Focuses on research, implementation, strategies and experiences for new technological solutions for social, health and rehabilitation. Visited mostly by public sector representatives, with some companies presenting their innovative solutions and projects. Mostly in Norwegian.

Nasjonal kompetansesenter for aldring og helse
– organizes annually four major conferences in different cities in Norway: 1) Dementia days 2) Geriatric psychiatry 3) Retardation and aging 4) Disability and aging.

Kommunesektorens Organisation (KS)
– is involved in the national programme on welfare technology and host several conferences throughout the year for supporting knowledge generation and diffusion of health and care solutions.

Norwegian Standards Institute

Standards Norway (SN) develops and establishes standards and standard products for the benefit and greater value creation for society, individual organizations and firms and the ordinary citizen.

Innovation Norway

Standards Norway (SN) develops and establishes standards and standard products for the benefit and greater value creation for society, individual organizations and firms and the ordinary citizen.

Fairs and conferences

Innovation Norway (IN) is the Norwegian Government’s most important agency for innovation and development of Norwegian enterprises and industry. They support both start-ups and established companies in developing their competitive advantage and enhancing innovation. IN aims for internationalization and has international market advisory services for increasing the chances of international success for Norwegian companies. At the same time, IN offers assistance to entrepreneurs and promising start-ups that have growth ambitions at an early start-up phase. If your firm has an innovative business concept, which represents something new and significant in the market, you can benefit by contacting IN.

Norway Health Tech
– (previously Oslo Medtech ) is a health technology cluster, dedicated to enhancing and supporting the development of new medtech and eHealth products, services and innovative solutions for the Norwegian and global health care markets. The cluster has approximately 190 members representing the entire health value chain. Their mission is to develop and industrialize world-class health technology products and services that enable sustainable and high quality treatment and care, and to facilitate innovation and growth in the Norwegian medtech industry. Their focus areas are facilitating R&D&I collaboration between research, industry and health care providers, nationally and internationally; stimulating and facilitating market-driven innovation and innovative procurement processes; facilitating clinical trials, testing and verifications; accelerating business development and international scaling; attracting development and investment capital; providing co-working space in Medtech Growth House and promoting the Norwegian health technology industry nationally as well as internationally. Norway Health Tech regularly arranges seminars, workshops and conferences for companies and the public sector (municipalities, hospitals, etc.).
Finland's population is aging, and the number of seniors will grow dramatically during the coming years. Currently, about 20% of Finland's total population is over 65 years of age, and the number of over 85 years old is expected to triple in size by 2035. This aging trend underscores the importance of targeted services now and in the future.

The government decides on general national strategies and priorities and proposes bills to be discussed by the parliament. Health care policy is the responsibility of the Ministry of Social Affairs and Health (MSAH). The ministry also directs and guides the development and policies in the areas of social protection, social welfare and health care.

Finland's decentralized public administration, municipalities decide for themselves how they will provide local services. Every municipality has the responsibility to offer health care services to their residents, and this is usually provided through municipal health care centres. In 2017, Finland has 297 municipalities.

**Trends in organisation of health care in Finland**

The organisation of Finland’s social and health care system will change significantly in 2020 according to a decision of the current Government. However, a detailed plan for this reform has not been published yet. The coming 2020 reform is intended to create conditions for a future model for health and social services in Finland. Eighteen new independent counties will be responsible for all public health and social services, rescue services, environmental healthcare, determining the duties of the regional councils and certain other municipal and regional state administrative duties.

All public health and social services will be brought under a single administrative umbrella run by the counties. The counties are in charge of integrating the services so that they form customer-friendly, well-functioning service and care chains. This applies to public health and social services both at the basic and specialist levels. All financing will be channelled via the counties to the service providers. The counties are responsible for making sure that public, private and third sector services within the scope of the customer’s freedom of choice work seamlessly together, that information flows smoothly and that the services meet quality criteria. The services will be purchased from public, private or third sectors service providers.

After the reform measures are implemented, the municipalities will be in charge of health and well-being.

**Primary and secondary care in Finland**

In Finland, primary and secondary care are carried out by the municipalities according to local circumstances, possibly together with the neighbouring municipalities, or by purchasing services from third parties.

**Primary care** is carried out by health care centres employing general practitioners and nurses; these centres provide most of the routine medical services. Health centres are also active in health promotion activities. The general practitioners are also gatekeepers to the more specialized services in the secondary and tertiary care sectors, as a referral from primary care provider is necessary to receive care on the secondary and tertiary levels. Primary health care includes e.g. consultation with a general practitioner and public health nurses, health counselling, preventive work and vaccinations, Delta Health Care, maternity and child health clinics, school health care, home nursing, laboratory and imaging services, and inpatient care for minor health problems.

**Secondary care** is provided by the municipalities through district hospitals, where more specialist care is available. The majority of the hospitals in Finland are public, i.e. owned by municipalities or joint municipal authorities. University hospitals and central hospitals of the hospital districts are responsible for more demanding medical operations. These hospitals are located in the major cities of Helsinki, Turku, Tampere, Kuopio, and Oulu. All of these five cities have a medical faculty.
Furthermore, there are regional hospitals and local hospitals, such as city hospitals, in Finland. Health centres in patient wards may also be called hospitals. Private hospitals supplement the public services, for example by providing ambulatory surgeries.

» Read more about secondary care

**Assistive aids**

The Ministry of Social Affairs and Health (MSAH) is responsible for the managing services for older people. It determines the course of service development, draws up legislation and oversees the implementation of reforms. The ministry also monitors service standards through the National Supervisory Authority for Welfare and Health and the Regional State Administrative Agencies.

Municipalities are responsible for administering the social and health services that older people require.

**Funding and expenditures**

The healthcare system receives funding from two sources. Municipal financing is based on taxes and is used to provide primary healthcare services. The municipalities also have a right to collect user fees, and they receive state subsidies if their tax levy is not adequate for providing the public services required, based on the demographic factors on their area. Municipalities fund the health centres on the primary care level and regional hospitals on secondary care level. As municipalities are both the providers and purchasers of the health services, it does not encourage cost-efficiency. National Health Insurance (NHI) is based on compulsory fees, and it is used to fund private healthcare, occupational healthcare, outpatient drugs and sickness allowance. Regional and university hospitals are financed by federations of participating municipalities, often using the diagnosis-related group system.

» Read more about the system

**Private sector**

Due to the comprehensive public sector, Finland’s private healthcare sector, where patients pay for services themselves, is relatively small. Between 3-4% of inpatient care is provided by the private healthcare system.

Municipalities organize home care for the elderly, which entails day-to-day assistance and nursing at home. Home care encompasses home services, home nursing and support services. Each municipality organizes the home care services independently, which means, for example, that they are responsible for organizing home help, housing services, institutional care and support for informal care. The actual organisation of the services may vary from one municipality to another (e.g., services can be provided by a municipality alone, or together with another municipality, or they can issue a voucher to users who can purchase services from a private provider).

In addition to municipalities, there are non-governmental organisations (for example The Central Union for the Welfare of the Aged, Finnish Red Cross). Finally, there are dozens of private service providers, SMEs or major health service companies that provide e.g. homecare and home services for elderly people. In these cases, the municipalities purchase the service from these providers. It is also estimated that home services are in many cases aimed at people living in sheltered homes, which means that people living in their own homes are often deprived of much needed services.

Tax revenues finance service provision/organisation. The costs of the services provided by municipalities for their clients are determined by their clients’ income. Financial support is dependent on the municipality’s age structure and the size of its population. This means that if the client’s income is very low, they receive the service free of charge. Clients may retain a certain percentage of their income each month for private consumption in case they reside in a publicly financed home for the elderly or in a hospital.

Nowadays ever more demanding nursing is provided at home because many people want to live at home until the end of their lives. These services also include support for family members, who are often caring for their loved ones. Patients will receive assistance and assistive equipment from health care centres for free.

**A major transformation in administering welfare and health from 2020**

Beginning in 2020, 18 new autonomous regions (counties) will be established to organize social and health care services.

The new counties will have responsibility for social and health care services, as shown in the figure at the right.
There are many causes behind the reform scheme. The increasing need for services among the aging population, the changing variety of illnesses and increased possibilities for treatment, along with greater expectations from the population, have created a pressure leading to a rise in healthcare costs. Slow economic growth and a high total tax rate when compared internationally have been an incentive to find new ways to curb these rising costs. Also, inequalities among different areas and groups have boosted the change.

The government is increasing the range of public social and health care services. Each of the new autonomous regions can choose to provide the necessary social and health services on its own or together with other regions, or they can hire private or third sector services. The service organisation of each autonomous region is led by expert managers who operate separately from the decision-making in organising the social and health services sector.

The municipalities will no longer organize or finance social and health services. Instead, the health and social service staff from the former municipal government authorities will now come under the direction of the autonomous regions.

In the future, there will be 12 hospitals with units providing extensive on-call services around the clock. Other central hospitals will provide 24-hour emergency and specialized services. In this way, there will be access to emergency assistance around the clock in all parts of the country.

By using compatible information, the conditions will create cooperation and effective activities in the autonomous regions.

In the future, municipalities will be responsible for promoting residents’ health and well-being. Although this will reduce the municipalities’ role in operational work,
municipalities will still carry out well-being services which affect the residents’ general health and reduce their need for more expensive medical services. Many services promoting healthy life style for elderly people belong to this category.

Finland has also established a national unit for joint procurement, which is owned by the autonomous regions and joint nationwide support services.

**Supervising and authorities**

**Valvira – National Supervisory Authority for Welfare and Health**
The National Supervisory Authority for Welfare and Health (Valvira) monitors the compliance of medical devices with the legislation and regulations, monitors the marketing of medical devices and promotes their safe use.

**THL – The National Institute for Health and Welfare**
The National Institute for Health and Welfare (THL) is a research and development institute under the Ministry of Social Affairs and Health. THL seeks to serve the broader society in addition to the scientific community, actors in the field and decision-makers in central government and municipalities. The focus of the Institute’s work is to promote health and welfare in Finland.

**SFS – Finnish Standards Association**
The Finnish Standards Association (SFS) is the central standardization organisation that controls and coordinates national standardization work in Finland. SFS members include professional, commercial and industrial organisations as well as the Finnish state in the form of several ministries.

SFS develops, approves and publishes national SFS standards. It also sells standards and disseminates information about the standards and standardization to the public. In addition, SFS operates the national WTO Enquiry Point.

Standards adopted as Finnish national standards are mainly European or International Standards. In such cases, the standard has been drafted by technical committees or working groups from the European Committee for Standardization (CEN) or from the International Organization for Standardization (ISO). Each CEN or ISO committee has a representative in one of the Finnish standards writing bodies of SFS. Standards are published as documents that anyone can purchase and use. Using the standards is free of charge. Standards documents are subject to a charge, and these user charges fund most of the work conducted by SFS and its standards writing bodies.

**FiHTA – The Finnish Health Technology Association**
FiHTA is the association bringing together all Finnish companies in the health technology sector.

The purpose of FiHTA is to represent the growing Finnish health technology sector and monitor the common interests of its member companies in order to improve their business environment. FiHTA forms a substantial forum for communication, cooperation and networking. It maintains ongoing contact with its interest groups and customers in the health service sector.

**HILMA - Public Call for Tenders Platform**
HILMA is a free, electronic advertising channel where contracting entities may publish their call for tenders. The service is maintained by the Ministry of Employment and the Economy. Through HILMA, companies can obtain real-time information on current procurement procedures as well as information on upcoming procurements.

Procurements exceeding the national thresholds and EU thresholds are advertised in HILMA. The service is available in Finnish and in Swedish, but most calls for tenders are written only in Finnish.

**Data protection in Finland**
The Norwegian Data Protection Authority is a public authority. Its task is to protect the individual’s privacy in the information society without unnecessarily preventing or complicating the use of new technology. It works to prevent encroachment upon privacy through information and by issuing directives and codes of statutes. The authority also handles complaints and carries out inspections. By examining government bills, the DPA ensures that new laws and ordinances protect personal data in an adequate manner.
The Data Protection Ombudsman and the Office of the Data Protection Ombudsman provide guidance and advice on all issues related to the processing of personal data and control the observance of the law.  
Read more here  
Act on the Protection of Privacy in Working Life

Investing support services for companies

Invest in Finland
Invest in Finland is the government agency charged with promoting foreign investment in Finland. They assist international companies in finding business opportunities in Finland and provide all the relevant information and guidance required to establish a business in Finland.  
Read more here

HBH – Helsinki Business Hub
Helsinki Business Hub (HBH) is the regional development agency for the Finnish capital region. Their task is to assist foreign companies in setting up their businesses and innovation-driven companies in the Helsinki area.

HBH consults with companies looking for opportunities in Finland, searching for the best location for R&D activities or are interested in the cutting-edge start-up environment of Helsinki region.  
Read more here

Tekes – the Finnish Funding Agency for Innovation
Tekes works with the top innovative companies and research units in Finland. Every year, Tekes finances some 1500 business research and development projects, and almost 600 public research projects at universities, research institutes and universities of applied sciences.

Tekes can also finance R&D projects undertaken by foreign-owned companies registered in Finland. International companies with R&D activities in Finland do not need to have a Finnish partner to be eligible for innovation funding. However, the financed project should offer the prospect of contributing to the Finnish economy.  
Read more here

The Finnish Society of Telemedicine and eHealth
The aims of the Finnish Society of Telemedicine and eHealth are to promote the health of the population through telecommunication and to disseminate expert knowledge within health care.

To achieve these aims, the society holds seminars, lectures and presentations, courses and symposia, and it has developed a sophisticated electronic communication system among members, carries out publishing activities, supports research within the discipline, formulates statements on issues dealing with telemedicine and maintains contacts with other telemedicine organisations.

The society organizes the Finnish National Conference on Telemedicine and eHealth annually. FSTeH is a member of the International Society for Telemedicine & eHealth.  
Read more here

Fairs and conferences

Slush
Slush is an international student-driven non-profit movement originally founded to change attitudes towards entrepreneurship. In 2015, Slush was organized in Tokyo and Beijing for the first time. In 2016, Slush spread to Tokyo, Shanghai and Singapore. The philosophy behind Slush is to help the next generation of great, world-conquering companies forward.  
Read more here

Nordic Health Technology & eHealth Forum
Nordic Health Technology & eHealth Forum are is a trade show held annually in the same venue as the Finnish Medical Convention. The event takes place at the beginning of the year, in January or February.  
Read more here

Upgraded Life Festival
A festival uniting the pioneers in Healthcare, Wellness, Big Data in Health, Quantified Self, Biohacking, Fitness, Health in Wearables and Internet of Things. The 2017 festival in Helsinki brought together over 1000 participants. The 2018 Upgraded Life Festival will take place 31 May to 1 June in Helsinki.  
Read more here
## Welfare-lisho

| UK | DK | S | N
|---|---|---|---
<p>| Citizen | Borger | Medborgare | Innbyggere |
| Mayor | Borgmester | Borgmåstare | Borgmester |
| Trade association | Brancheforening | Branschorganisation | Brancheforening |
| City Council | Byråd/kommunalförbund | Kommunfullmäktige | Byråd |
| (Trade) Union | Fagforening | Fackförening | Fagforening |
| Non-disclosure agreement (NDA) | Fortrolighedserklæring | Sekretessavtal | Fortrolighetsavtale |
| Administration | Forvaltning | Förvaltning | Forvaltning |
| Administration’s decision | Forvaltningsavgjørelse | Förvaltningsbeslut | Forvaltningsavgjørelse |
| Caregiver | Hjemme hjælper | Vårdgivare | Hjemmehjelp |
| Home Care | Hjemmepleje | Hemsjukvård | Hjemmesykepleie |
| Home Nursing | Hjemmesygepleje | Hemsjuvkår | Hjemmesykepleie |
| Assistive aid | Hilfeværd | Hjelpemiddel | Hjelpemiddel |
| Intellectual property (rights) | Immaterielle (rettigheder) | Immaterielle rättigheter | Immaterielle (rettigheter) |
| Municipality | Kommune | Kommun | Kommune |
| Legal/legislative framework | Lovgrundlag | Lovgrundlag | Lovgrundlag |
| Public procurement | Offentlig indkøb | Offentlig upphandling | Offentlig anskaffelse |
| Public Tender | Offentligt anbud | Offentligt anbudsförfarande | Offentlig anbud |
| Personal Data Act | Personuppgiftslagen (PuL) | Personuppgiftslagen | Personuppgiftslagen |
| County | Region | Län | Fylke |
| County Council | Regionsråd | Landsting/region | Fylketinget |
| Rehabilitation | Rehabilitering | Rehabilitering | Rehabilitering |
| Risk assessment | Risikovurdering | Riskanalys | Risikovurdering |
| Informed Consent | Samtykkeerklæring | Samtyckesblankett | Samtykkeerklæring |
| Social and health care assistant | So. Su. Assistent | – | Sosial- og helsevesenet assistent |
| Social and health care helper | So. Su. Hjælper | Underskåterska | Sosial- og helsevesenet hjælper |
| State | Stat | Stat | Stat |
| Health Authority | Sundhedsstyrelsen | Läkemedelsverket | Helsemiindheden |
| Home carer | Sygehjælper/hjemmehjælper | Vårdbiträde/Undersköterska | Sykepleier |
| Nurse | Sygeplejerske | Sjuksköterska | Sykepleier |
| Telemedicine | Telemedicin | – | Telemedisin |
| Supervisory body | Tilsynsmyndigheden | Tilsynsmyndigheten | Tilsynsmyndigheten |
| Welfare Technology | Velfærdssteknologi | Velfærdssteknologi | Velfærdssteknologi |
| Scientific Ethical Committee | Videnskabsetisk komité | Etikprøvningstilnemnd | Etikprøvningstilnemnd |
| Home care visitor | Visitator | Besøkare | Besøkende |
| COPD**** | KOL | KOL | – |
| Commercialization | Kommerialisering | Kommersialisering | Kommersialisering |
| Evaluation | Evaluering | Utvärdering | Evaluering |</p>
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* Inspektionen for vård och omsorg (IVO) är tilsynsmyn- dighet för användning av medicinska produkter i hälso- och sjukvården
** Valvira Sosiaali- ja terveysalan lupa ja varvontavirasto
*** Regionale komiteer for medisinsk og helsefaglig forsk- ningsetikk
**** There is not a direct English translation “Welfaretechnology” would be the closest but does not cover the Danish meaning of the word. The term “velfærdeste- knologi” covers technologies for improving health- and care, for maintaining independent living etc.
***** COPD chronic obstructive pulmonary disease
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