

Healthcare Technology

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INVEST IN FINLAND

Business Opportunities and
Consulting Services for
International Companies

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1. Executive summary

The Finnish medical technology market was worth 633 million euros in 2009, and is expected to continue growing at 5%-6% per year. As customers, who are mainly in the public sector, are demanding increased after-sales services, it is all the more important for manufacturers to have a strong presence in the market to be successful in public tenders.

The healthcare goods market is expected to grow as the population ages and the amount of disposable income increases. More consumers are willing to invest in the wellbeing of themselves and their families.

Finland is also an ideal location for a European or Nordic headquarters, especially if good connections to Asia are required. The Finnish workforce is highly educated, with good language skills, and there is a supportive business environment for new companies.

In addition to sales, many foreign companies have also established R&D operations in Finland. They benefit from a large pool of educated professionals, experienced in the medical devices industry, and a wide range of business services.

The Finnish medical devices sector is rich with high-tech, market-leading companies, which represent lucrative acquisition opportunities for foreign investors.

2. Global healthcare technology industry

2.1. What is healthcare technology?

As an innovative, wide-ranging and growing research and technology-based industry, the medical technology sector is a significant contributor to healthcare provision. It provides patients with state-of-the-art treatments to alleviate pain, restore health and extend life.

Healthcare providers expect technology to increase efficiency, reduce costs and help to contain ever-rising healthcare costs.

The medical devices industry offers a variety of products – from bandages, wheelchairs and glasses to high-tech systems such as computer tomographs. Medical devices also include healthcare software, which goes through the same rigorous testing and registration as physical products.

For a more detailed description, see Appendix 1.

2.2. Market in figures

The medical technology industry is a growing market worldwide. This will continue due to advances in medical technology, ageing populations and increased patient investment in their health.

The world market for medical technologies is worth around 220 billion euros (source: BVMed, Eucomed). The American market is worth 90 billion euros, followed by the European market at 65 billion euros. It is estimated that, up to 2020, the demand for medical technology in industrial countries will grow by 3% to 4% a year. Important growth markets include emerging giants China, India and Brazil, and in Europe, Russia and Poland.

3. The domestic market for healthcare technology

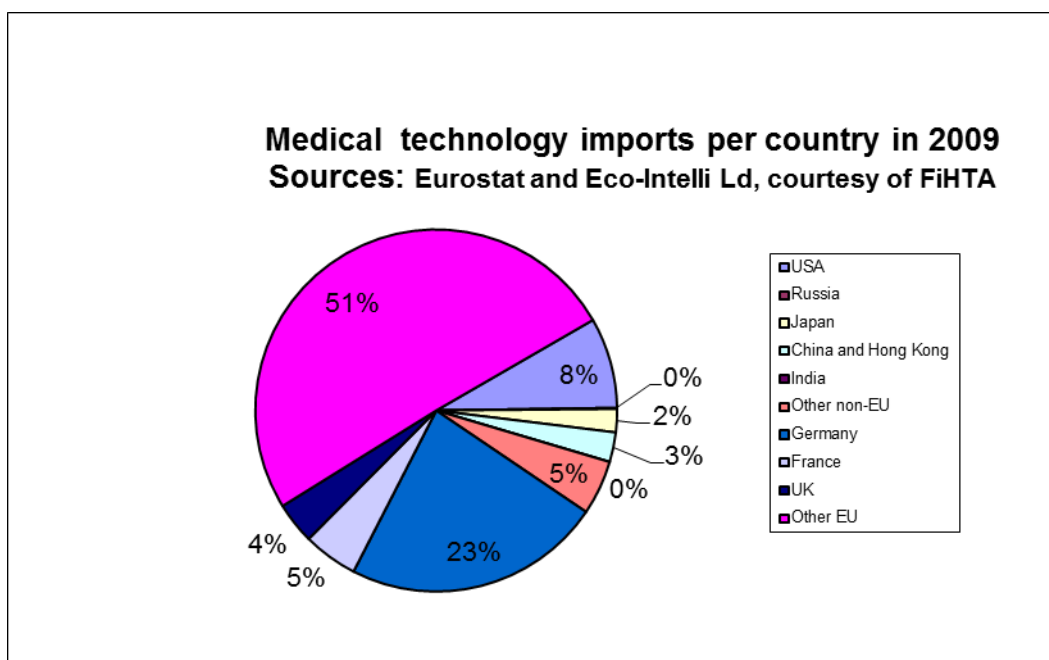
3.1. Market size and outlook

The domestic market for medical equipment was worth 633 million euros in 2009, and consists of a wide variety of different products required by the healthcare system. These include:

- IVD (in-vitro diagnostic) instruments and reagents (38% of total expenditure on medical technology), also the fastest-growing area
- surgical instruments, dental equipment and mechanotherapeutic devices (24%)
- orthopaedic and supportive products (20%)

Around 81% of imported products are of EU origin, or imported by a company in the EU. Imports from Germany represent 23% of the value of all imports, up 50% over the past five years, while the share of products of US origin has dropped from 26% to 8%. Imports from Japan have dropped to 2%, but China has emerged and now accounts for 3%.

In many health technology categories, Finnish prices appear to be higher than in other European markets, providing opportunities for higher margins.



The seasonal variation per product category can be significant. When looking at the longer-term trend, the whole market has been expanding steadily and is expected to continue growing at 5%-6% a year.

Supportive products such as hearing aids and walking sticks are traditionally provided by communal healthcare. With increasing living standards, consumers have also started acquiring these products themselves, looking for greater quality and choice. For example, personal security systems for the elderly (usually wrist units) are often provided by their families.

The market is likely to continue to grow, reflecting higher incomes in retirement, with patient choice taking place through, for example, service vouchers.

3.2. Distribution of health technology in Finland

Attracted by the growing market in healthcare technology, some large healthcare companies have opened Finland-based distribution subsidiaries. These include B.Braun, GE Healthcare, Abbott and Medtronic.

Many companies are now combining their Nordic operations into one regional office. Nevertheless, sales and support personnel are required on location due to service and local language requirements.

Finland is an excellent location for a Nordic office, due to the country's bilingual population and excellent connections to Asia.

The largest distributors of medical equipment and supplies are Mediq and OneMed, both multinational corporations operating in several countries. Mediq recently entered the Finnish market by acquiring Oriola KD, the market leader in healthcare distribution.

For speciality areas, there are also dedicated distributors focusing solely on a particular sector. The distribution of dental materials is organised primarily through wholesalers such as Hammasväline Oy, Dental-Service Nick Oy, Plandent Oy, Mediq, K.A. Rasmussen and Mads Dental Oy.

For physiotherapy equipment and supplies, the market leader is FysioLine. Other distributors include Lojer, Saga and Mediq, mainly for supplies.

3.3. Health technology procurement

3.3.1. Overview and trends

As healthcare services are primarily public (70%), trends in public procurement have a big impact on the industry. As across Europe, public-sector procurement is increasingly centralised and tenders are the usual method of purchasing. Contracts are often for several years, which sometimes causes difficulties for smaller players.

Clients expect technology to help improve efficiency and cut costs, while improving patient care. Service quality and availability are increasingly important, as hospitals are reducing their own engineering resources. When suppliers have a local presence and Finnish-speaking service personnel, these are considered assets too.

3.3.2. Legislation on public procurement

According to the Public Procurement Act, and in line with similar legislation across the EU, all public investment will be put out to tender. Regardless of the value of the procurement, a tender notice or notices must be published in proportion to its size and nature.

The national system for information on public contracts is HILMA (www.hankintailmoitukset.fi). Contracts exceeding certain thresholds will also need to be published in EU official journals and the TED (tenders electronic daily) database.

Criteria for the selection of the services or products provider may include economic, technical or other performance factors, as stated in the tender's public issue.

Foreign-owned companies are equally allowed to participate in public tenders, and may not be discriminated against in awarding contracts.

4. Finland as a medical devices exporter

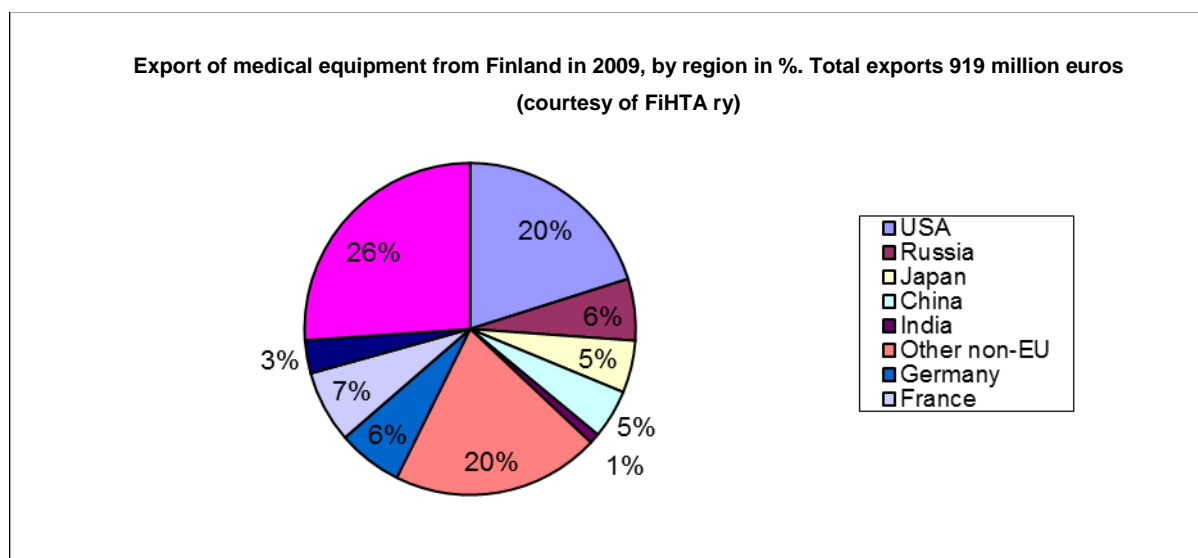
Finland is a net exporter of medical technology. In 2009 domestic production was worth over 837 million euros, with more than 90% being exported.

Technology is increasingly re-exported. Here, complete solutions are assembled from domestic and imported products and then exported. In the IVD industry this represents around half of exports by value.

Finland is well located, especially in relation to the Baltic countries and Asia, and is therefore ideal for European sales headquarters. A skilled workforce is readily available, for example for final assembly or customisation aimed at various European markets.

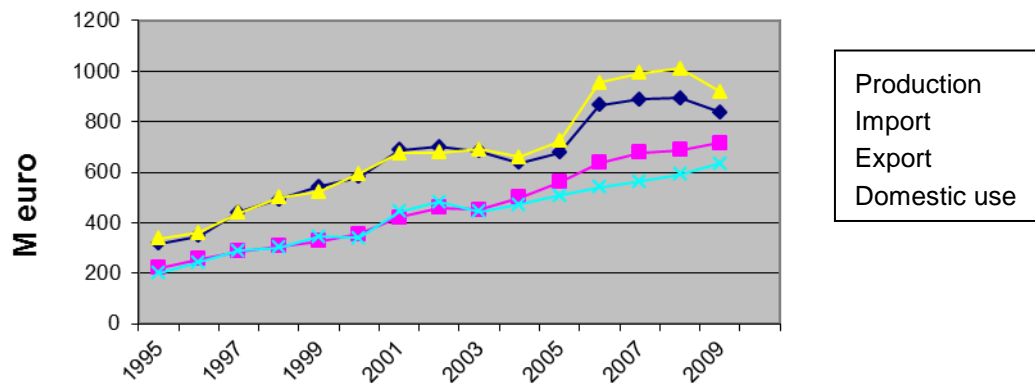
When using Finland to increase market presence globally, foreign-owned companies can use various internationalisation services. These include the trade centre network of Finpro, the Finnish foreign trade association (www.finpro.fi), and TEKES (www.tekes.fi).

The most important markets for Finnish medical technology are the EU (42% of exports) and the USA (20%). Russia represents 6% of exports, twice its share 2004. China and India account for 6% and 5% of exports respectively, showing that Finnish exporters have entered, and have good access to, these vast and dynamic markets. See figure below for details.



Finnish medical equipment market in figures, 2009

Sources: Eurostat and Eco-Intelli Ld
(courtesy of FIHTA ry)



The most important product categories in exports for 2008 include:

- IVD products, 312 million euros
 - 178 million euros for instruments, half of this re-exported
 - 134 million euros for reagents and anti-serums
- X-ray and radiological equipment, 193 million euros, especially dental and mammography (doubled since 2000)
- dental instruments, 123 million euros (of which 83 million euros is domestic production and a large portion is re-exported)

5. Finnish health technology industry characteristics and trends

5.1. Overview of business opportunities

Finland's health technology cluster has deep technological expertise in specialist technologies and applications. Several global market leaders have emerged but a large group of technologically capable companies lack the marketing expertise and financing required to grow internationally. While ample support is available for R&D, there is insufficient public funding for commercialisation and the Finnish venture capital market is underdeveloped in the life sciences sector.

There are therefore good opportunities to acquire a company and build it into an international success story.

Finland also has the right environment for setting up an R&D unit, including the skilled workforce required.

5.2. Finnish health technology industry focus areas

5.2.1. The high-tech legacy

The industry consists largely of small companies, often founded around a specific technical innovation such as a new imaging technology or a new diagnostic tool developed during research. Some of these have grown into world-class companies, of which many now have international ownership, fuelling further development and international growth.

Strengths include neurological imaging (at companies such as Elekta, Nexstim and Philips Medical Systems), Finland being the only country in Europe with companies active in this field.

Among other strengths are clinical diagnostics (for example Wallac/Perkin Elmer, Biohit and Medix Biochemica) and dental equipment (Planmeca), as well as biomaterials (Bioretec) and high-end disposable products.

The Finnish legacy goes on, with new companies continuing to emerge around a new innovation. Examples include:

- Onbone – new materials for casting and splinting (www.onbone.fi)
- Relaxbirth – a new concept for birthing (www.relaxbirth.fi)
- Corusfit – cardiac rehabilitation (www.corusfit.fi)

5.2.2. New innovations and business models

More and more companies are identifying specific needs or gaps in the market and combining existing technologies in new ways. Examples include:

- using Finnish telecoms expertise to create new tools using wireless technologies or other advanced communications (eg, EcoTec SmartCare portal solutions (www.smartcare.fi) and Medixine portals (www.medixine.fi))
- healthcare providers making care processes more efficient, reducing routine procedures and improving patient flow, personnel and equipment (eg, the Addoz medication dispenser and related services (www.addoz.com))

While in the past a device was delivered to the customer, now it is often a complex system with software licences, update and maintenance agreements and various services. The more complete solutions help businesses to improve their competitiveness and profitability.

5.3. Global players already present in the market

Having technological expertise, world-class products and application knowledge, but not the resources, needed for international growth, has led many Finnish companies to foreign ownership. Foreign companies entering the Finnish market in this way include GE Healthcare, Philips Medical Systems, Thermo Fischer and Elekta. While under foreign ownership, the companies have continued to use the strong R&D know-how and co-operation networks and have kept R&D activities in the Finnish business units.

As an example, the Finnish unit of Philips Medical Systems recently developed a new non-invasive procedure for tumour removal.

Production has often remained in Finland, close to the development team. This makes sense for the complex, low-volume product typical in this industry. However, more components and modules are being sourced from abroad.

6. The ecosystem for health-tech companies – strong foundations

6.1. Highly educated workforce

In Finland there is extensive engineering expertise and a deep understanding of healthcare customer requirements. Also, compared with other Western countries, skilled-worker salaries are reasonable.

High-volume production is not financially viable but the industry is used to sourcing globally where applicable to keep manufacturing costs down. It concentrates on adding value to low-cost components through its high-quality engineering know-how.

As an example, Serres (www.serres.fi) manufactures and exports globally high-quality products and accessories for suction procedures.

6.2. Close co-operation with research institutions

The industry cooperates more closely with life science research than in many other countries. Collaboration also extends to other disciplines, due to the proximity, idea-sharing, communication and co-operation between sciences and incubators in single-campus areas.

Intellectual property rights are always taken into account in the research co-operation, legislation is well developed and Finns take pride in working in an honest relationship with their partners.

There is also close co-operation with healthcare professionals, although this is now getting more difficult due to limited resources and tighter procurement regulations. Close collaboration speeds the design and testing phase of a product and ensures it is focused on the customer's needs.

Finns co-operate actively at international level, thanks to their excellent language skills. It is easy for international companies to enter the local networks and start collaboration, especially if they have a permanent local presence in Finland.

6.3. Business services dedicated to health technology

The outsourcing trend has come to this industry as well. In Finland there is a thriving network of companies providing product development, testing and certification, and contract manufacturing – and all are specialists in medical technology.

Companies include Innokas Medical, Medisize, Atostek, Nemko, Inspecta and VTT Services.

6.4. Public organisations supporting the healthcare cluster

In Finland many support services exist to foster innovation and business development. In terms of public support, foreign companies with a legal entity in Finland are considered equal to domestic companies.

TEKES, the Finnish Funding Agency for Technology and Innovation, is Finland's top public organisation for financing research, development and innovation. The body does not profit from its activities or claim any intellectual proprietary rights.

TEKES provides support either for individual applications, or for programmes focusing on a particular area. Programmes are designed to provide opportunities for carrying out ambitious R&D projects and for developing business expertise and international cooperation. One of its strategic priorities is 'wellbeing and health'.

The Centre of Expertise Programme (www.oske.net) provides networks and services for companies, universities, universities of applied sciences and research institutions. It also reinforces innovation hubs that can be attractive partners for international networks.

One member of the Centre of Expertise Programme, the Finnish Health and Wellbeing Cluster, is a development platform for health and wellbeing services and associated technologies (www.hyvinvointiklusteri.fi/en) and assists relevant companies in the field.

7. Relevant legislative issues

Medical devices imported to Finland must carry the appropriate CE (European conformity) marking for the type of product in question, and comply with the EU Medical Device Directive. Acquiring the CE marking is the manufacturer's responsibility. No additional registration is required by the distributor for medical devices, with the exception of IVD products intended for self testing.

If the manufacturer is from outside the EU, and does not have a legal entity within the EU, it must nominate an authorised EU-based representative to carry out its legal duties.

The manufacturer's contact details must be provided either on the device or package. Instructions and other information accompanying medical devices must be in Finnish, Swedish or English. Information intended for users or patients to safely operate a device must be in both Finnish and Swedish.

Market surveillance for medical devices in Finland is the responsibility of Valvira (www.valvira.fi/en), the national supervisory authority for welfare and health. Valvira monitors the compliance of medical devices with legislation and regulations to promote their safe use.

For more details, see the list of relevant legislation in Appendix 3.

Appendix 1: Definitions

Source: Eucomed

“Medical devices,” according to the definition of the EU Medical Devices Directive (93/42/EEC), are “any instrument, apparatus, appliance, material or other article, whether used alone or in combination, including the software necessary for its proper application, intended by the manufacturer to be used for human beings for the purpose of:

- diagnosis, prevention, monitoring, treatment or alleviation of disease
- diagnosis, monitoring, treatment, or alleviation of, or compensation for, an injury or handicap
- investigation, replacement or modification of the anatomy or of a physiological process
- control of conception

and which does not achieve its principal intended action in or on the human body by pharmacological, immunological or metabolic means, but which may be assisted in its function by such means.” (Directive 93/42/EEC)

Classification based on the Global Medical Device Nomenclature

Code	Term	Examples
01	active implantable technology	cardiac pacemakers – neurostimulators
02	anaesthetic and respiratory technology	oxygen mask – anaesthesia breathing circuit – gas delivery unit
03	dental technology	dentistry tools – alloys – resins – floss – brush
04	electromechanical med. tech	X-ray machine – scanner – laser
05	hospital hardware	hospital bed
06	in-vitro diagnostic technology	pregnancy – blood glucose, genetic tests
07	non-active implantable tech.	hip – knee joint replacement – cardiac stent
08	ophthalmic and optical tech.	eye glasses – contact lenses – ophthalmoscope
09	reusable instruments	various surgical instruments
10	single-use technology	syringes – needles – gloves – balloon catheters
11	technical aids for disabled	wheelchairs – walking and hearing aids
12	diagnostic and therapeutic radiation technology	radiotherapy units

According to the [Global Medical Devices Nomenclature](#), there are 12 categories of products, 10.000 generic groups

Appendix 2: Listing of the most relevant companies active in Finland

Please note that this is not a full listing of the companies in the sector. The companies have not been contacted to check their willingness for acquisition.

Foreign-owned companies

Companies with R&D units in Finland

- GE Healthcare Finland Oy (part of GE Healthcare, a General Electric company headquartered in the UK), www.gehealthcare.com – R&D for patient monitoring, ventilation, health IT
- Philips Healthcare Finland Oy (part of Philips Healthcare, headquartered in the Netherlands) – R&D for medical imaging
- Elekta Neuromag Oy (part of Elekta, headquartered in Sweden), www.elekta.com – neurological imaging
- Perkin Elmer Wallac Oy (part of Perkin Elmer, headquartered in the US), www.perkinelmer.com – genetic screening, analytical science, life science
- Thermo Fisher Scientific Oy (part of Thermo Fisher Scientific, headquartered in the US), www.thermoscientific.com
- Medisize, www.medisize.com – contract development and manufacturing (majority shareholder, Ratos of Sweden)

In addition, several foreign healthcare companies have a sales office in Finland. These include Siemens Healthcare, Fresenius, Medtronic and B.Braun. Sailab ry, the association for the companies delivering medical equipment and supplies, has members including most of the companies present in Finland (see <http://www.sailab.fi/jasenlista.html> for a list).

Health technology companies under Finnish ownership

This list below covers the more established companies with a mature product line and sizeable business.

- Planmeca Group, www.planmeca.com – dental equipment
- Biohit, www.biohit.com – liquid handling products (pipettes) and diagnostic products
- Optomed, www.optomed.fi – digital visual inspection instruments
- HUR, www.hur.fi – fitness equipment for medical and rehabilitation use
- Nexstim, www.nexstim.com – brain-mapping systems
- Mega Elektroniikka, www.meltd.fi – biosignal monitoring
- Polar Electro, www.polar.fi – instruments for sports and fitness training
- Medic Biochemica, www.medixbiochemica.com – monoclonal antibodies and diagnostic tests
- Ani Biotech, www.anibiotech.fi – diagnostic rapid tests
- Merivaara, www.merivaara.com – hospital furniture
- Lojer, www.lojer.com – medical furniture
- Innokas Medical, www.innokasmedical.fi – medical device contract manufacturing and design

Many smaller companies are also present in the market. Some 90 companies are estimated to be active in the health technology sector and many are members of the Finnish Health Technology Association FiHTA. See www.fihta.fi and <http://www.teknologiateollisuus.fi/en/branches/member-companies-and-organizations.html> for a list of members.

Appendix 3: Legislation on medical devices

Unofficial translations are available through the text links.

1. Medical Devices Act ([1505/94](#)) modified, Amended by Act 680/1999, Act 345/2000 and Act 892/2001
2. Medical Devices Decree ([1506/94](#)) modified, Amended by Decree 426/2000
3. Decision of the Ministry of Social Affairs and Health concerning medical devices ([1994:67](#))
4. Decision of the Ministry of Social Affairs and Health concerning medical devices ([1994:66](#))
5. Decree of the Ministry of Social Affairs and Health concerning notifications to be submitted on certain medical devices ([831/2000](#))
6. Decree of the Ministry of Social Affairs and Health concerning in-vitro diagnostic medical devices ([830/2000](#))