

TERVEYSTALO

QUALITY BOOK 2019



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YEAR 2019

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FOREWORD

TERVEYSTALO PROVIDES HEALTH CARE WITH MODERN SOLUTIONS

The Finnish health care system is facing several major challenges. Our health care costs have grown more rapidly than our national economy, and the access to health services is poor. As Finland's biggest private health service provider, Terveystalo, aims to respond to his challenge.

Our view is that the entire capacity of the private sector, including staff, facilities and equipment, must be deployed to avoid the overall costs from increasing as well as to reach, for instance, the government’s objective of a seven-day care guarantee. Digital services can offer an excellent solution as they enable access to care in as little as a few seconds. Terveystalo offers an extensive and ever-increasing range of high-quality remote services. In 2019, we also launched scheduled video appointments, allowing all Finns to have fast access to care by a specialist.

Going forward, the focus of health care will increasingly shift from the treatment of diseases to maintaining health, with the core focusing on patient-centered care instead of structures and organizations. Terveystalo wants to be part of this global transformation. Our enhanced Oma Terveys application gives our customers a handy overview of their personal health, while the Etydi 360 risk identification system used by our professionals helps us identify the individuals whose health may eventually be at risk. Another effective solution worth mentioning is our low-threshold mental health service, which has allowed our customer companies to significantly decrease their mental health-related sick leave days.

Everything we do is guided by our quality triangle of customer reported, clinical and operational quality. We continuously develop our operations. Our highest-ever customer satisfaction score –achieved in 2019 – is proof of that. Our battle to defend healthier lives is bearing fruit, and we are extremely proud to offer the country's best quality work and reporting in the field of health care.

Petri Bono
Chief Medical Officer
Terveystalo

YEAR 2019

In 2019, Terveystalo invested in digital services and preventive care. With the scheduled video appointments, our specialists are now available remotely. Our Net promoter score (NPS), which measures the customer experience, reached a record-high level during the year.

Customer encounter at Terveystalo Herttoniemi



QUALITY AT TERVEYSTALO IN BRIEF

Terveystalo, a company listed on the Helsinki Stock Exchange, is the largest private healthcare service provider in Finland in terms of revenue and network. The company offers versatile primary and secondary healthcare services for corporate and private customers as well as the public sector. The nationwide network covers around 300 clinics across Finland, supplemented by 24/7 digital services, available all over the world.



QUALITY AT TERVEYSTALO



WE MEASURE AND DEVELOP CLINICAL QUALITY

Healthcare must be based on evidence, as well as good care and operating practices, and it must be of high quality, safe, and appropriately implemented. At Terveystalo, we actively monitor, measure and manage clinical quality. The metrics used are primary patient safety indicators and clinical quality indicators.

Coherent patient safety management and uniform processes work as a basis for measuring our impact. During 2019, we developed our in-house clinical reporting and specified clear clinical quality indicators, which are actively monitored and managed. The clinical quality indicators for 2019 are referrals to psychotherapy for those diagnosed with depression and anxiety, appropriate use of medicines affecting the central nervous system, children’s cough medicines, and sick leave after orthopedic surgery. These indicators and their management are continuously developed. They are supported by national care guidelines and good care practices. In addition, the service directors, chief specialists, and chief physicians of the units play a key role in clinical quality and patient safety management.

We want to stay at the forefront of development in terms of measuring the quality, transparency, and effectiveness of treatment, as well as in disclosing the results of clinical quality in Finland.

WE WANT TO OFFER A SUPERIOR EXPERIENCE TO CUSTOMERS AND PROFESSIONALS ALIKE

The customer’s experience is always personal and develops through every encounter. It is important to us that customers receive the care they need without delay and are encouraged to make choices that promote their well-being. Our objective is to be the preferred provider of health care services for all customer groups.

We ensure a superior customer experience starting from the very first encounter with the customer by actively identifying and fulfilling their personal expectations and needs. Our digital tools that support customer-oriented service are an integral part of our treatment experience.

We systematically monitor and develop our operations and service portfolio to further improve the benefits provided to the customer. In order to ensure a smooth care experience, we deployed a new operating model during 2019 to ensure that the customer knows the next steps in every stage of their care. Furthermore, we developed a new audit model in which an auditor accompanies the customer, with their permission, throughout the appointment, observing the customer’s experience and how well the processes work.

We believe that satisfied employees provide a better customer experience in customer encounters, and thus, enhance customer satisfaction. To realize our strategy, we must be able to attract qualified and motivated healthcare professionals to work at Terveystalo as well as retain them.

By doing this, we can achieve clinical quality, superior service experience, and operational efficiency.

“**WE ARE ON THE FRONT LINE OF DEVELOPMENT IN TERMS OF MEASURING THE QUALITY, TRANSPARENCY, AND EFFECTIVENESS OF TREATMENT AS WELL AS IN DISCLOSING THE RESULTS OF CLINICAL QUALITY IN FINLAND.**”

OPERATIONAL QUALITY IS ABOUT SMOOTH EFFICIENCY AND UNIFORM QUALITY

Streamlined processes ensure the smart allocation of resources and the reliability of operations. All services provided by Terveystalo are based on our comprehensive and certified quality management system. Our customers can always trust the quality of our care and the convenience, efficiency and safety of our services. In addition, we promote a pleasant and efficient everyday life by enhancing our expertise, leadership, and business management.

Our comprehensive network and extensive service range form a platform for providing efficient, personal, and local services for customers. At the same time, they cater to the needs of large corporate and public-sector customers in Finland.

Our clinic network is supported by our versatile remote solutions, granting customers access to services regardless of time and place. We make significant investments in the continuous development of digital services and tools. The most recent of these is the deployment of video appointments in 2019. We believe that the magnitude of our operations enables us to continue investing in state-of-the-art technology to develop new services, enhance the efficiency of processes, and increase service reliability.

Read more about Quality management on pages 34–35.

ACHIEVEMENTS IN 2019

1

QUICK ACCESS TO CARE IN PUBLIC SERVICES

On average, access to care was more than three times faster in units outsourced to Terveystalo when compared to public health clinics in Finland’s major cities. The T3 figure, which represents the time to the third available appointment with a physician, was 8 to 11 days in units outsourced to Terveystalo and 28 to 30 days in the public sector.

+ READ MORE ON PAGE 28

2

CUSTOMER SATISFACTION AT AN ALL-TIME HIGH

The most important metric we use to measure our customer experience is the Net Promoter Score (NPS) index. In 2019, we managed to improve our NPS in all areas and achieved our highest total NPS result ever.

+ READ MORE ON PAGE 23

3

ACCESS TO A PHYSICIAN IN SEVEN SECONDS

We made great strides in the development of our remote services in 2019. Climate-friendly digital health services are in line with our objective to use resources wisely.

On average, customers are still able to access our physician via chat in less than seven seconds. We have also developed our messaging services further, and it is now possible for customers to communicate with their own physician or occupational health nurse using secure messaging in the Oma Terveys (My Health) application. Furthermore, the customer’s personal digital health plan known as Oma Suunnitelma (My Health Plan) has been developed in a more user-friendly and interactive direction.

+ READ MORE ON PAGE 26

4

REMOTE VIDEO APPOINTMENTS ENABLE TREATMENT REGARDLESS OF LOCATION

Remote appointments bring the physician to the patient while saving the patient’s time. The assisted video appointments launched in 2019 allow the physician to perform tasks such as auscultating heart and lung sounds or examining the skin or ears, even if the patient and assisting nurse are hundreds of kilometers away.

+ READ MORE ON PAGE 26

5

THE LARGEST NUMBER OF TREATMENTS IN CLINICAL RESEARCH

We are the biggest clinical contract research company in Finland. In 2019, Terveystalo was involved in approximately 90 different clinical research protocols where patients were treated with effective new pharmaceuticals.

+ READ MORE ON PAGE 21

6

IMMEDIATE ACCESS TO MAMMOGRAPHY RESULTS

Thanks to our development work, customers are able to view their mammography screening results in the Oma Terveys (My Health) application immediately after the result is ready.

As Finnish radiation legislation was updated in 2019, we revised our operating models and instructions. We also conducted a safety assessment and implemented the appropriate organizational processes for the use of radiation.

+ READ MORE ON PAGE 16

7

INVESTMENTS IN PREVENTIVE CARE

In 2019, we emphasized investments in preventive care, with a focus on both occupational health and private customers.

More and more of our customers seek out health care professionals even if they do not have a medical condition, any symptoms or a diagnosis. Here the objectives are health care and maintenance, as well as effective prevention of illnesses. To this end, we offer low-threshold services, such as consultative well-being and rehabilitation services, to promote mental well-being, nutrition, and physical activity, as well as massage therapy to support physical well-being. Furthermore, our oral health services also focus on preventing damage rather than repairing it.

8

NEW DIGITAL APPLICATIONS FOR PROFESSIONALS

Our mobile application for professional use, Terveystalo Pro, was published in the fall of 2019. The effectiveness tool Etydi was completely revised, as well. Now, professionals can benefit from the support of artificial intelligence, using more than a hundred algorithms to search the patient population for risks.

+ READ MORE ON PAGE 12

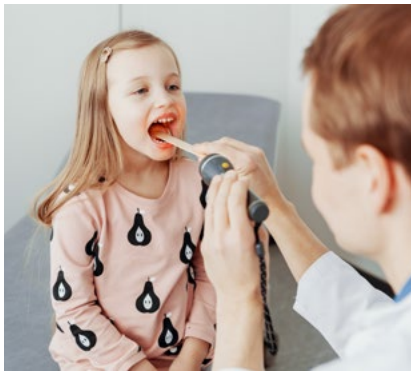



INDICATORS OF CLINICAL QUALITY

↑

Ascending target

↓

Descending target

	INDICATOR	DEFINITION	2018	2019	TARGET	TARGET STATUS	
COMPLIANCE WITH CARE GUIDELINES		Brief psychotherapy for patients with depression and anxiety	Psychotherapy referrals/diagnosis	New indicator	0.8%	⬆️	🟢
		Prescribing medicines affecting the central nervous system	Prescriptions/appointments with physician	4.8%	4.9%	⬇️	🟡
		Children’s cough medicines	Prescriptions/respiratory tract infections	4.2%	2.8%	⬇️	🟢
EFFECTIVENESS OF SURGICAL OPERATIONS		Return to work following orthopedic surgery	Duration of sick leave	90 and 55	84 and 45 (6 month follow-up needed)	⬇️	🟢
		Recovery of functional capacity following knee surgery	KOOS survey (pre-12 months)	60→84	12-month follow-up needed	⬆️	🟢
		Recovery of functional capacity following shoulder surgery	WORC survey (pre-12 months)	43→86	12-month follow-up needed	⬆️	🟢
EFFECTIVENESS OF OCCUPATIONAL HEALTH CARE		Share of preventive work	The ratio between preventive services and medical treatments	43%	45%	⬆️	🟢
		Customers’ self-evaluations concerning the progress of health objectives	Share of evaluations that health objective has progressed as planned or better	68%	71%	⬆️	🟢
IMAGING		Sinus x-ray examinations	Share of occipito-mental projections	90%	91%	⬆️	🟢
		X-ray examinations in lower back pain diagnostics	Number of lumbar spine X-ray examinations	9,276	8,801	⬇️	🟢

IMPACTS ON OUR CUSTOMERS, HEALTHCARE PROFESSIONALS, AND SOCIETY

In 2019, Terveystalo had approximately 1.2 million individual customers and employed more than 13,000 professionals. We want to provide our customers with high-quality preventive services and an excellent customer experience. For our professionals, we guarantee diverse work tasks and career paths.

Remote video appointments enable treatment anywhere regardless of location.



HEALTH CARE PROFESSIONALS

UNIQUE DIGITAL TOOLS FOR THE PROFESSIONAL

We provide our healthcare professionals with versatile tools. Etydi, Terveystalo Pro, clinical reporting, and Dashboard make it easier for them to manage and develop their own work. In addition, they provide our professionals with tools to manage the quality of their own work and research. The aim of the tools is to improve the treatment of our patients.

Sari Riihijärvi

ETYDI – ARTIFICIAL INTELLIGENCE FOR PROFESSIONALS

We use Etydi, a real-time care impact tool, to support our decision-making. It already has more than 800 daily active users. Etydi collects data from electronic medical records and health questionnaires completed by customers and processes it using more than one hundred different algorithms. It provides the professionals with a completely new kind of information about the work ability and disease risks of their patient population.

Etydi is particularly well suited for use in occupational healthcare. With Etydi, we can target preventive measures correctly and ensure that we accurately treat those who are already ill. Etydi allows every physician to know, for example, the number of their own patients with diabetes, hypertension, coronary disease, or asthma, as well as the situation concerning their treatment and other risks to work ability and health.

In Etydi, physicians can also compare their own policies for prescribing medication and sick leave with colleagues in the same specialty or in the whole of Terveystalo.

TERVEYSTALO PRO

Terveystalo Pro is a proprietary mobile application for Terveystalo's healthcare professionals. Pro was launched at Terveystalo's Medical Convention in September 2019.

Pro aims to ease professionals' work and provide the information and features required for work management through a convenient

mobile application. With Pro, professionals can view and edit their future appointment lists and schedule additional work shifts. They can also use the application to view their invoicing and fee data.

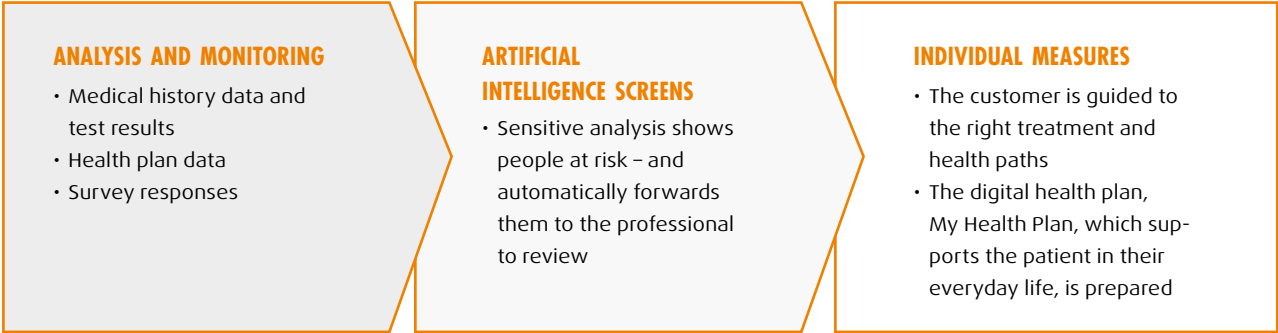
We are continuously developing Pro, and in 2020, we will expand its use into new professional groups. In the future, it will be possible to use Pro to view the laboratory and imaging results of one's own patients, send messages to the patient, and monitor the quality indicators for one's own work.

MEDICAL REPORTING AND DASHBOARD

Annually 3.7 million physician's appointments take place at Terveystalo. As a result, our electronic medical records accumulates a massive amount of information about diseases, diagnoses, sick leave, and prescriptions. The data set is unique, even internationally speaking – especially regarding the working-age population. Our medical reporting tools collect this data in anonymous form so that the patients' personal data is kept in the patient information system. We can use the data to develop our operations and, in the future, increasingly utilize it for research. The first doctoral dissertation studies based on our data have already begun.

In addition, the medical directors of our clinics have access to the medical Dashboard, allowing them to monitor the realization of our indicators of clinical quality at their own clinic, address any deviations from the Current Care guidelines and encourage the physicians of the clinic to further improve the quality and impact of care.

UTILIZING ARTIFICIAL INTELLIGENCE FREES UP THE PROFESSIONAL'S TIME TO ENGAGE WITH THE CUSTOMER



PATIENT SAFETY IS THE CORNERSTONE OF QUALITY AT TERVEYSTALO

Patient safety is the foundation for the quality of healthcare: the patient correctly receives the treatment they need, causing the minimum adverse effects. Patient safety can be measured and led systematically through prevention, monitoring, and the analysis of errors.

Riina-Riitta Helminen, Mari Kanerva, Ira Molander, Riitta Pyhäjärvi, Sanna Sarin

PATIENT SAFETY IS MANAGED THROUGH KNOWLEDGE

Patient safety is a continuously monitored and developed key area of quality at Terveystalo. It refers to the safety of care, medications, and equipment. The objective is to protect the patient from harm.

Compared to the number of visits, Terveystalo's patient injury rates are below the industry average. We manage patient safety by monitoring post-surgery infections by procedure and clinic, hazardous events, official requests for corrective action, and the decisions of the Patient Insurance Center, among other measures.

The safety and effectiveness of the medications we prescribe are ensured by medication plans, operating guidelines and the basic medication range. Of Terveystalo's 17 hospital units, 13 have a dispensary. In 2019, our pharmacists conducted 115 medication safety visits to our units. In addition, we offer clinical services medication to social care service providers as a way to ensure the safe supply and administration of medication. Approximately 60 medication safety visits to customer locations took place in 2019.

Our infectious disease specialists analyze antibiotics-related practices and present recommendations. For example, cephalosporins were most commonly used for skin infections in 2019, even though a medicine from the penicillin group would often be the most effective.

Hazardous events related to medical equipment are reported electronically internally, as well as to the authorities. The Radiation and Nuclear Safety Authority has issued a safety license for Terveystalo's use of radiation.

TWO INDICATORS FOR MONITORING LONG-TERM TRENDS

As indicators for patient safety trends, we monitor the ratio of near miss situations to hazardous events (52%, objective > 60%) and the ratio of deep and superficial infections in the operated areas to the number of surgical procedures (0.59%, objective < 1%).

The ratio of near miss situations to hazardous events indicates how well we anticipate potential risks. We identify the factors leading to the hazardous event through root cause analysis and decide on measures to prevent it from reoccurring. Our hygiene working group analyzes the causes leading to surgery-related infections. The ratio of surgery-related infections is monitored internally, annually and benchmarked with other parties.

CHANGING FOCAL POINTS ARE SET ANNUALLY

In 2019, the focal points of patient safety were zero adverse events in the labeling of pathological samples of endoscopic examinations (outcome 0 events), aseptic behavior (outcome 2 events), and vaccination (outcome 39 events).

OBJECTIONS VS. VISITS TO A PHYSICIAN

0.009%

N = 309

COMPLAINTS VS. VISITS TO A PHYSICIAN

0.001%

N = 44

NOTICES OF PATIENT INJURIES VS. VISITS TO A PHYSICIAN

0.011%

N = 392

NUMBER OF INCIDENT REPORTS VS. ALL VISITS TO A PHYSICIAN

0.14%

N = 5,032

NEAR MISSES VS. ALL INCIDENTS

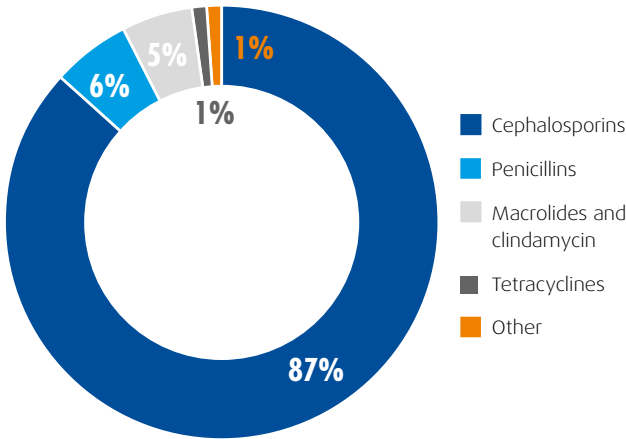
52%

N = 2,600

INFECTIONS VS. SURGICAL OPERATIONS

0.59%

ANTIBIOTICS PRESCRIBED FOR SKIN AND SOFT TISSUE INFECTIONS 2019



HEALTH CARE PROFESSIONALS

HIGH-QUALITY SURGICAL OPERATIONS IN A WIDE HOSPITAL NETWORK

Terveystalo performs surgeries in a network of 17 hospitals. We aim at swift, high-quality care in accordance with care criteria, restoring the ability to function and work quickly. We systematically develop the surgery patient’s treatment chain.

Anna-Mari Heikkinen, Teemu Paatela

TERVEYSTALO PROVIDES SURGICAL CARE ALL OVER FINLAND

Terveystalo is known as a medical clinic, but we also have 17 hospital units. They operate in the facilities of medical clinics in 15 different cities, and include two hospital units in Helsinki and two in Turku. Our hospitals serve both private customers and patients referred by insurance companies, occupational health services, and municipal cooperation. In addition to the medical clinic hospitals, we performed surgeries in three public healthcare hospitals in 2019: Iisalmi, Lappeenranta, and Varkaus. With regard to our hospital units, cooperation with municipalities is the most common in Tampere and Oulu. In general, the number of surgical patients from public health care has increased in recent years.

In 2019, our hospitals performed surgeries on over 22 000 patients in total. Our smallest surgical units mainly engage in outpatient orthopedic, hand surgery, and head and neck operations, some also in glaucoma surgery, gastrointestinal surgery, urological and gynecological procedures, and varicose vein treatments. In addition to these, our larger units perform, among other things, endoscopic surgeries, breast surgeries and abdominoplasty, back surgeries and gastric bypasses, and endoprosthetics.

Emergency rooms operate in all our larger units. Surgical operations necessitated by accidents have, in fact, increased. Furthermore, as the population ages, problems related to aging are on the rise as well. Consequently, hernia, cataract, endoprosthesis and pelvic prolapse surgeries have increased. On the other hand, treatments related to knee or shoulder complications caused by age have moved in a more conservative direction due to changes to the clinical practice guidelines. Almost all of our units make it possible to stay overnight if required by the procedure or the patient’s condition.

INCREASING SMOOTH ACCESS TO CARE FOR SURGERY PATIENTS

We continuously strive to make the treatment of surgery patients as smooth as possible – from the discovery of a condition requiring surgery, to the decision on surgery and the return to work.

Customer satisfaction among our surgery patients (Net Promoter Score, NPS) is high, at 89.2 percent in 2019. In addition to the professionally qualified staff, our patients appreciate the speed of the treatment chain and friendly and caring personnel. We have received particular praise for the follow-up telephone call made by the surgery unit on the day after the surgery.

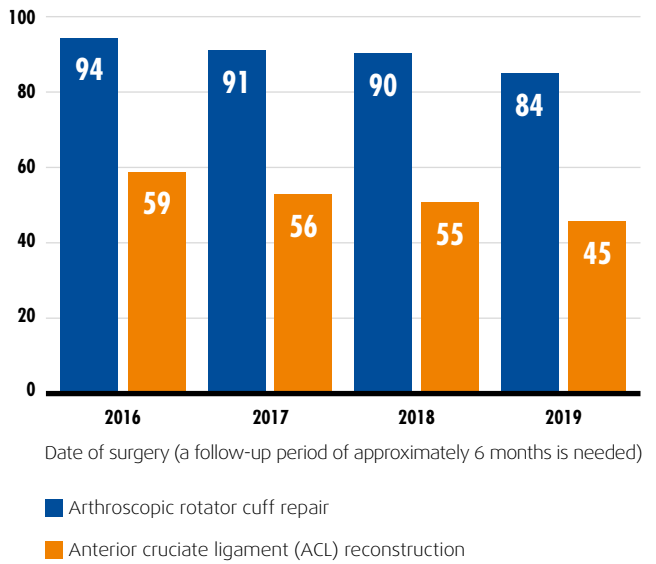
In 2019, we have developed our appointment system for surgeries with the aim to plan pre-examinations and arrange an appointment

for the operation within 24 hours after the decision to operate is made. Due to our emergency services, the first assessment on care happens without delay, and in our larger units, cases in need of urgent care can be carried out within 24 hours. In non-urgent cases, surgery can be arranged without queueing while taking into account the patient’s wishes. We strive to speed up payment agreement processes and to minimize the delays related to them.

SHORTER TREATMENT CHAINS OF KNEE AND SHOULDER OPERATIONS

The operating model, launched in fall 2015, aims to minimize the time between the accident and return to work. Sick leaves of those who due to occupational accidents became clearly shorter during the follow-up period.

RETURN TO WORK AFTER SURGERY (DAYS, MEDIAN)



GOOD OPERATING METHODS ENABLE FASTER RETURNS TO WORK

The goal of post-operative care at Terveystalo is to restore the patient’s ability to work and function. Quick surgery with correct preparation, early rehabilitation, and the return to work plan play a key role in achieving this. Our aim is to refer surgery patients to occupational healthcare and physiotherapy within one month of the operation. In 2019, an occupational health physician made a post-operative assessment within one month of the operation in 60% of general knee and shoulder operation cases. Our aim is to facilitate referrals to occupational healthcare professionals.

We apply the nationwide sick leave recommendations, which state that the orthopedist does not take a stand on the surgery patient’s return to work, but the assessment is made by an occupational health physician. The occupational health physician also decides – taking into account the functional restrictions imposed by the surgeon – on extending sick leave beyond 28 days, and on the deployment of replacement work. This has made returns to work significantly faster.

WE MEASURE PATIENT SAFETY IN DIVERSE WAYS

Patient safety is measured in several ways at our hospitals. We record post-operative infections, hazardous events, audit deviations, notices of patient injuries, objections, and complaints in real time, and we review them using a root cause analysis. Our established practice also includes the systematic use of the World Health Organization (WHO) operating room checklist before the start of the procedure. The standardized set of questions checks safety matters essential to the operation in the operating room. In 2019, the list was used in 97.2% of operations at Terveystalo.

In reporting hazardous events, we aim for a low threshold, and as a result, the number of reports has increased. In our units, the number of post-surgical infections and official clearance requests is small. Our hospital units, including those that operate within public hospitals undergo regular internal and external auditing processes.

IMPROVED EFFECTIVENESS IN ORTHOPEDIC SURGERY

We aim to continuously improve patients’ recovery from orthopedic surgery. The goal is for the patient to recover to a normal functional level as quickly as possible.

We monitor the effectiveness of surgical operations using patient-reported outcome measures (PROM). These scores reflect the benefits of treatment to the patient. The patient assesses their functional level before the surgery, and again at 6 and at 12 months after the operation. In the knee operation-related knee injury and osteoarthritis outcome score (KOOS), shoulder-related Western Ontario Rotator Cuff Index (WORC) and Western Ontario Shoulder Instability Index (WOSI) scores, 0 refers to the lowest and 100 to the highest functional level. The score of the indicators can be compared with the values of the normal population. Only a sufficiently high increase in the score can be considered as significant for the patient.

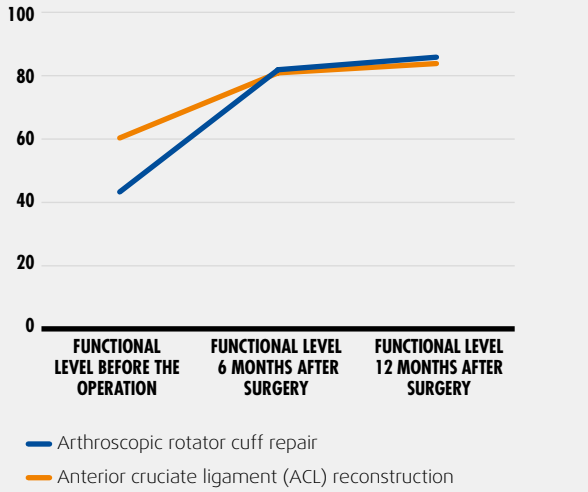
According to these PROMs, patients have received significant benefit from orthopedic knee and shoulder surgery at Tereveystalo.

FASTER RETURN TO WORK AFTER ORTHOPEDIC SURGERY

Fast recovery from surgery is achieved by treatment processes without delays, optimally scheduled rehabilitation, and early planning of the return to work. This requires seamless cooperation between the orthopedic surgeon, physiotherapist, and occupational health physician.

We assess the treatment chain by measuring the time of returning to work after surgery; and the time of returning to work has markedly improved. Over the past 3 years patients have returned to work one week earlier.

PATIENT-REPORTED IMPROVEMENT OF FUNCTIONAL LEVEL AFTER ORTHOPEDIC SURGERY



HEALTH CARE PROFESSIONALS

EVERY FOURTH BREAST CANCER IN FINLAND IS DIAGNOSED BY TERVEYSTALO

A quarter of breast cancer cases in Finland are detected in examinations at Terveystalo. We play an important role in promoting health in the country. We ensure high customer satisfaction, for example by investing in digital services.

Soile Komssi

EFFECTIVE BREAST CANCER DETECTION

Breast cancer is the most common type of cancer among Finnish women, and one in four cases of breast cancer among Finns are found by Terveystalo. Annually, we perform approximately 200,000 breast examinations: 180,000 screening mammographies, 32,000 clinical mammographies and 150 breast MRI scans.

In addition to breast cancer screenings, we offer breast examinations in 36 clinics to those private and occupational customers that do not belong to screening age groups. We play an important social role in promoting the health in Finland.

MAMMOGRAPHY SCREENINGS RECEIVE PRAISE

Terveystalo has considerable experience in providing breast cancer screening, and at the moment, we cooperate with around 230 municipalities. Through screening, we aim to detect breast cancer as early as possible. All women aged 50–69 are invited to breast cancer screening once every two years.

The quality of our mammography screening is based on our systematically controlled screening process and the professional skill and experience of the personnel performing the screening. Based on customer satisfaction queries, our customers are very pleased with the service and customer experience at Terveystalo. In every encounter, we treat patients with dignity as individuals, making sure they feel safe throughout the screening process. In fact, we receive praise for this.

RESULTS WITHOUT DELAY FROM THE OMA TERVEYS SERVICE

In 2019, a section was developed in Oma Terveys that enables customers to browse, cancel, and edit future mammography screening appointments through the Oma Terveys application. In Oma Terveys, the customer can also immediately view the results and reports of other imaging studies performed at Terveystalo, such as clinical breast examinations, once the report is complete. This accelerates the screening process and also better meets the needs of our customers.

If the customer has chosen to receive SMS notifications, they are informed of the completion of the screening results days faster than before – immediately once the results are complete. All screening customers are also sent an invitation letter and a letter on the results of the examination, as before. If the screening result requires additional examinations, we contact the customer by telephone in order to schedule a follow-up appointment.

BREAST EXAMINATIONS MADE EASILY AVAILABLE

In our extensive network of clinics, breast examinations are easily and quickly available. It is necessary to ask for a doctor’s referral for breast

KEY FIGURES AND QUALITY INDICATORS AT TERVEYSTALO

NUMBER OF BREAST EXAMINATIONS

210,000

CANCERS DETECTED BY SCREENING

1,153

NET PROMOTER SCORE OF SCREENING

88.3

examinations if there are structural changes, long-term local pain, or secretion from the breasts. For women aged over 40, breast examinations are recommended approximately once every two years. The examination method is chosen based on the customer’s individual situation. For example, changes in a young woman’s dense breast tissue can best be detected through ultrasound or tomosynthesis, with the imaging done from several directions in a fan-like manner instead of two-way projection images.

Breast MRI, on the other hand, is the most sensitive method for finding breast cancer. It is available at 16 clinics, also without a referral. Our equipment is supplemented by mobile MRI and mammography devices, which make it possible to provide services at close convenience to the customer. If the patient wishes to have the risk of cancer excluded as accurately as possible, for instance due to increased risk, the highest clarity is achieved by using MRI and supplementary examination methods.

TOWARDS MORE PERSONAL HEALTHCARE

We are moving towards increasingly personalized healthcare, with the customer’s symptoms, previous examinations and medical history as well as genetic risks and family history influencing the examination and treatment methods chosen.

The scientific community has even proposed using risk data of the screened individual in determining the breast cancer screening methods and frequency. This would maximize the effectiveness of screening.

RADIATION DOSE OF A MAMMOGRAPHY EXAMINATION

1.1 MGY

WAITING TIME FOR BREAST SCREENING RESULT (MEDIAN)

5 DAYS

ORAL HEALTH THROUGH PREVENTION AND SELF-CARE

Traditionally, professional oral healthcare seeks to address damage. At Terveystalo, we want to act preventively. The aim is an infection-free mouth.

Tanja Ketola-Kinnula

Oral health is an important part of overall health. It is associated with chronic diseases, such as diabetes, atherosclerosis, hypertension, and obesity. At Terveystalo, all healthcare professionals learn together to identify the risk groups for oral diseases. In our industry, oral healthcare is conventionally about addressing damage, but we act preventively. Our minimum goal is an infection-free mouth.

We acknowledge oral health, for example, in our occupational health processes and treatment chains from a general physician’s appointment to dentist’s treatment. We emphasize regular dental care based on proper examinations and an individual oral healthcare plan. The customer’s self-care plays a significant role.

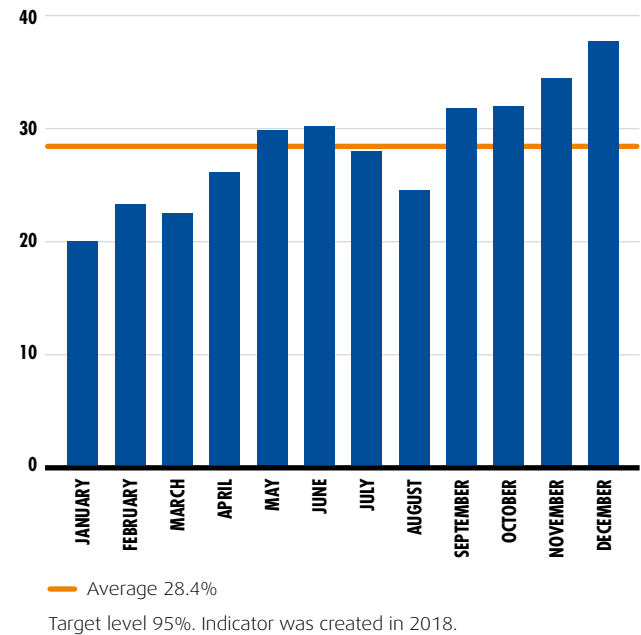
To support self-care, we provide the digital Oma Suunnitelma tool in addition to advice. At the same time, we specify how frequently the customer should have a professional cleaning between check-ups. If the customer’s oral situation requires special care, we provide top-level expertise in all areas of special dentistry.

ACHIEVING ORAL HEALTH OBJECTIVES THROUGH THE USE OF QUALITY INDICATORS

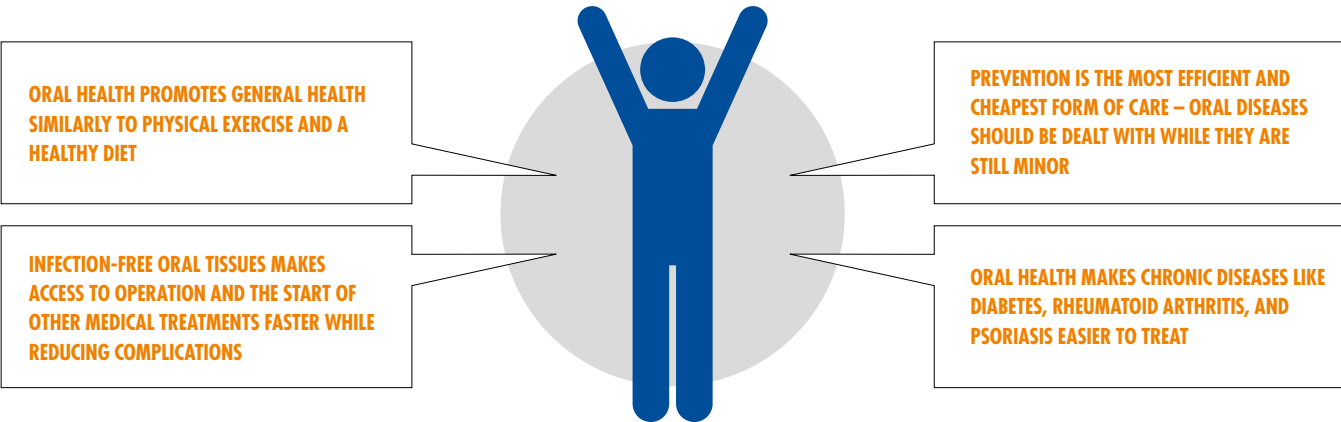
We have set three qualitative indicators for the health impact of oral healthcare in order to encourage our experts to reach our objective of an infection-free mouth. The indicators promote achieving the realization of oral and dental care according to the Current Care Guidelines.

In 2019 we have communicated the indicators to our dentists. Additionally, we have created a reporting tool for effectively managing our work going forward using data.

THE PERCENTAGE OF PATIENTS WHOSE SUPPORTING DENTAL TISSUES HAVE BEEN EXAMINED DURING A CHECK-UP VISIT



ORAL HEALTH IS AN IMPORTANT PART OF A PERSON’S GENERAL HEALTH



HEALTH CARE PROFESSIONALS

PROJECT ON MEDICINES AFFECTING THE CENTRAL NERVOUS SYSTEM TARGETS COMPLIANCE WITH CURRENT CARE GUIDELINES

When used properly, medicines affecting the central nervous system (CNS agents) are effective and necessary. However, due to their adverse effects, their use requires careful discretion by a physician. The aim of the project on CNS agents is to help ensure that CNS agents and other medicines with abuse potential are always prescribed in accordance with the care guidelines.

Harri Seppälä

PRESCRIBING CNS AGENTS REQUIRES DISCRETION

CNS agents include a variety of pharmaceutical substances that, when used properly, are effective and necessary for the treatment of severe anxiety, short-term insomnia, or pain, for instance. According to the Finnish Current Care Guidelines, the use of CNS agents should primarily be short-term; however, their long-term use is very common. CNS agents have various adverse effects, and therefore, physicians must be particularly careful when prescribing them. The patient’s situation must always be examined before making the care decisions, and there must always be a clear medical indication for CNS agents.

The majority of patients use CNS agents according to the physician’s instructions. Even when used properly, CNS agents involve adverse effects, so in long-term use in particular, the physician must know their patient well and carefully consider the benefits and disadvantages of the medication.

CNS agents and other medicines with abuse potential are very popular substances as intoxicants, often as part of a patient’s multiple-drug abuse. Patients who abuse medicines aim to distract and manipulate physicians in many ways to get as much of the medicines they want as possible. Medicines also end up in street drug trade. In the case of a patient with an abuse problem, CNS agents are part of the problem, not the solution. Therefore, a physician should identify the signs of drug abuse,

refrain from prescribing medicines, and motivate the patient to seek appropriate care.

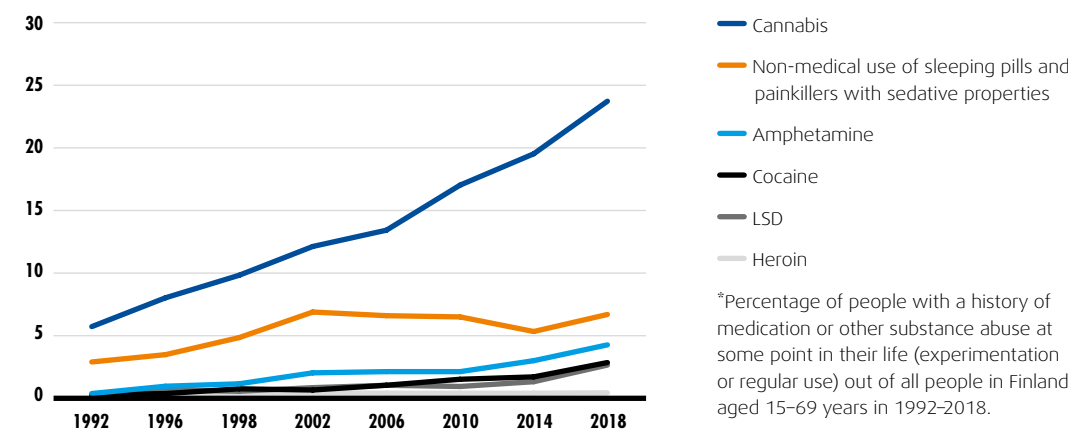
THE PROJECT ON CNS AGENTS PROMOTES THE SAFE USE OF MEDICINES

In late 2019, Terveystalo launched a project aimed at promoting the safe use of CNS agents according to the care guidelines in the treatment of patients. In order to harmonize the prescription practices, we have prepared detailed guidelines on prescribing CNS agents. The procedures presented in our guideline do not only apply to CNS agents, but also to all other pharmaceutical substances with abuse potential, such as medicines classified as narcotics, muscle relaxants, and gabapentinoids.

Terveystalo’s own guidelines are based on legislation, the Current Care Guidelines, and the Vältä viisaasti guideline, guidelines issued by the National Supervisory Authority for Welfare and Health, and operating models proven in clinical work. They are intended for all Terveystalo physicians, whether they work in a public healthcare unit, occupational health services, or private practice.

In addition to written guidelines, our personnel are provided with training and, if necessary, personal guidance. The physicians-in-charge at the units monitor prescriptions for CNS agents using Terveystalo’s information systems.

MEDICATION AND SUBSTANCE ABUSE*



LONG-TERM MONITORING ACCORDING TO THE CURRENT CARE GUIDELINES

Sari Riihijärvi, Peter Csonka

EFFECTIVE METHODS FOR TREATING DIABETES

Diabetes is a societal problem in Finland and in the rest of the world. More than half a million Finns already have diabetes, and their number is growing. Many people also suffer from diabetes without knowing it. The costs of treating diabetes account for a significant share of healthcare costs globally. Medical expenses account for some of this cost, but an even bigger part is caused by the loss of productivity due to sickness absence and premature retirement among diabetics.

Terveystalo aims to promptly identify those people who are at risk of diabetes. In order to allocate preventive care to them. Diabetics, on the other hand, should be guaranteed good control. With the diabetes under control, the results are a decrease in absences due to illness and improved quality of life.

Each Terveystalo physician and nurse has access to the Etydi tool for monitoring their patients’ diabetes control. In the assessment, we use the indicators specified in the Current Care Guidelines.

We have been publishing our type 2 diabetes treatment outcomes since 2016. In 2019, the treatment outcomes related to long-term blood glucose level, LDL cholesterol, and blood pressure improved in comparison to the previous year.

DIABETES CONTROL OF PATIENTS AT TERVEYSTALO

HBA1C, BLOOD GLUCOSE LEVEL OVER A PERIOD OF TIME

Target level according to the Current Care Guidelines under 7%

76%

Patients with well-managed diabetes

LDL CHOLESTEROL LEVEL

Target level according to the Current Care Guidelines under 2.5 mmol/l

46%

Patients with well-managed diabetes

BLOOD PRESSURE

Target level according to the Current Care Guidelines under 140/80 mmHg

71%

Patients with well-managed diabetes

TERVEYSTALO ADDRESSES PRESCRIPTIONS FOR CHILDREN’S COUGH MEDICINES

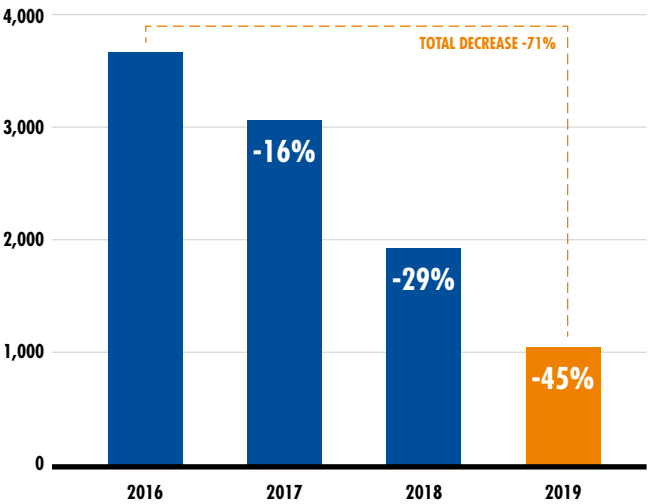
According to clinical studies, cough medicines do not relieve symptoms in children. This has also been recorded in the Current Care Guidelines that we follow. In fact, our objective is that all Terveystalo physicians will have discontinued prescribing cough medicines to children by the end of 2020.

Since 2018, we have provided doctors and parents with written information about the ineffectiveness and possible adverse effects of cough medicines. We have also monitored the number of cough medicine prescriptions in real time at the national, regional, and specialty level.

Our work has achieved results: the number of prescriptions for children’s cough medicine prescriptions has decreased in every unit and specialty. In particular, the number of prescriptions has decreased in the infant age group. The work will continue.

We want the Current Care Guidelines to be followed as closely as possible in all patient groups. Therefore, we assess children’s medical care more extensively in other therapeutic areas. More attention is paid to treatment practices associated with lower respiratory tract infections, number of chest X-rays, use of antibiotics, treatment for children’s reflux disease, diagnostics of children’s anemia and pulmonary function tests.

NUMBER OF COUGH MEDICINE PRESCRIPTIONS WRITTEN FOR CHILDREN AT TERVEYSTALO IN 2016–2019



HEALTH CARE PROFESSIONALS

BIOBANK BUILDS WELL-BEING FOR THE FUTURE

Terveystalo’s Biobank, launched in 2017, aims to be the first biobank to return large-scale genome data to sample donors. We promote this through the national FinnGen project, for example. Customers of Terveystalo also firmly trust our Biobank.

Markku Nissilä

BIOBANK SEEKS WAYS TO PREVENT DISEASES

Suomen Terveystalo’s Biobank was licensed by the National Institution for Welfare and Health in 2017 as the first genuinely private bio-bank. The goal of our bank is to prevent diseases and discover new forms and methods of treatment by combining clinical and genetic knowledge.

The biobank operates nationwide. We have almost one hundred sampling points from Helsinki to Rovaniemi. In terms of the number of biobank consents (>120,000 consents in 11/2019), our bank is Finland’s biggest.

We primarily collect and manage our customers’ consents electronically. Our customers can refuse, withdraw, or give consent easily through the Oma Terveys service, which requires strong authentication for use. Thanks to our operating method, the customer can make the decision in their own time while also making consent management easier for us.

Of those deciding to give consent, more than 90% respond positively and less than 10% do not give consent. This indicates strong trust in Terveystalo and our Biobank. On the other hand, it also illustrates that Finns are interested in biobanks.

FINNGEN STUDY SEEKS FACTORS EXPLAINING DISEASES

Terveystalo’s Biobank is involved in the nationwide FinnGen research project, which aims to increase understanding of the reasons behind diseases. It also aims to promote the diagnosis and prevention of diseases and the development of cures. In order to reach this objective, we will need biobank samples from half a million Finns. We will also be one of the first parties to return genetic data to the sample donors.

QUALITY SYSTEM CERTIFICATE IS PROOF OF OUR HIGH QUALITY

We pay careful attention to quality at Terveystalo. We hold the ISO 9001:2015 Quality System Certificate awarded by Labquality Qualification. Labquality has also audited the operations of Terveystalo’s Biobank.

Customers’ privacy and the confidentiality of data are the most important customer promises of Terveystalo’s Biobank. Therefore, the safety of our information systems is at the highest level possible. The information systems used in biobank operations are audited by KPMG.

THE BIOBANK IN A NUTSHELL

A biobank collects and stores biological samples and donor-related health data for the purposes of medical research.

In addition to biological samples, other subject-related data collected with the consent of the subject is also stored in biobanks. Data may have been collected with questionnaires, in conjunction with sampling, physical examination, or during an episode of inpatient care. The data is stored in accordance with the good data processing and management practices specified by legislation.

Biobanks disclose samples and data to high-quality research and product development projects aiming to find the causes of diseases and promote general health. The goals of Suomen Terveystalo’s Biobank are the promotion of the population’s health, the identification of factors involved in disease mechanisms, the prevention of diseases, and the development of products or treatment practices that promote the population’s well-being or health, or that are used in medical care. We investigate the causes of diseases and support the development of products and treatments used in health care. With the help of biobanks, even currently incurable hereditary diseases may become curable in the future. In addition, the customers of Terveystalo include a large number of people of working age who less commonly undergo specialized medical care.

NOVEL METHODS FOR TREATING PATIENTS IN CLINICAL TRIALS

Terveystalo Clinical Research (TCR) is the biggest clinical contract research company in Finland. Our strengths include rapid recruitment of study subjects and a high-quality study nurse network.

Lasse Parvinen

ANSWERS TO DISEASE TREATMENT FROM CLINICAL RESEARCH

Terveystalo Clinical Research (TCR) manages all clinical research projects carried out at Terveystalo. The roots of TCR and the foundation of its international contacts date back to 1992. Following mergers, expertise was transferred in 2009 for the present-day TCR to develop further. Terveystalo Clinical Research (TCR) is the biggest clinical contract research company in Finland. It started operations in 1992.

TCR’s sponsors, such as pharmaceutical companies and manufacturers of medical devices, can complete contract and budget negotiations, and obtain investigators, study nurses, subjects, and invoicing services from a single point of contact.

Since 2018, we have expanded our operations from clinical drug trials into vaccine and pharmacovigilance studies and statistical analyses. The results obtained from statistical analyses and featured in premium medical journals have already influenced the treatment practices of individual illnesses, such as migraines. Moreover, we have started cooperation with different university faculties in order to carry out academic research projects.

COMPETITIVE ADVANTAGE FROM RAPID RECRUITMENT OF STUDY SUBJECTS

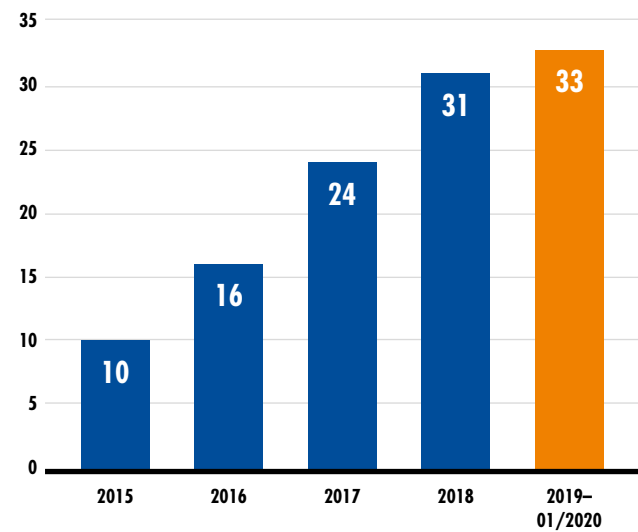
We compete with research centers in several countries in the recruitment of subjects. As we are globally known for our rapid recruitment, sponsors are happy to propose new trials for us to conduct. Our strength lies in the permit process of our study subjects. Terveystalo’s customers can give us permission to contact them in conjunction with clinical trials through the Oma Terveys (My Health) application or at our customer service desk, which makes it possible to quickly invite large numbers of people to participate. This operating method has been in use for more than five years. In this way, we have received over one million contact permissions from our customers.

TCR’s strengths also include proprietary IT applications, such as TrialWEB, an application that assists in managing research projects. It makes it easy to get an overview of ongoing trials, manage invoicing, and ensure that the trial proceeds according to schedule. Finding clinical investigators, on the other hand, is facilitated by the use of a proprietary tool.

TRAINED CLINICAL RESEARCH NURSES ENSURE HIGH-QUALITY TRIALS

The network of clinical research nurses is an essential part of a successful clinical trial project. The clinical research nurses are nurses,

TERVEYSTALO’S SCIENTIFIC PUBLICATIONS



Scientific publications affiliated with Terveystalo, number of publications in peer reviewed international and Finnish journals.

public health nurses or laboratory nurses by education. The clinical research nurses and investigators have completed international Good Clinical Practice training. Terveystalo’s internal work instructions and training events also facilitate high-quality conduct in research. Due to the international nature of the trials, we use English as the working language.

Terveystalo clinical research nurses, IT solutions, and permissions to make contact from over one million customers make studies possible at an even larger scale. For this reason, we are continuously looking for new investigators from all specialties and occupational groups. Trials provide the specialists working at Terveystalo with an excellent alternative for developing themselves and their expertise.

HEALTH CARE PROFESSIONALS

PHYSICIANS’ DIVERSE CAREER PATHS

An increasing number of physicians spend the majority of their careers with Terveystalo. Therefore, we want to guarantee diverse career development opportunities for our experts while taking their different lifr situations into account. Our career paths include both conventional specialist training and other types of further professional qualifications, as well as development in expert, managerial and executive roles.

Emma Kajander

HIGH-QUALITY SPECIALIZATION TRAINING

We work actively to help physicians specialize as broadly as possible at Terveystalo. We carry out all of our specialization training in strong cooperation with the medical faculties of universities.

Our occupational health specialization program is the most extensive of our paths. It is possible to specialize at almost all of our occupational health clinics, and the entire two-year occupational health residency can be completed with us. The residency includes clinical work as an occupational health physician under the supervision one's own designated personal trainer physician. It also includes all of the meetings and training associated with specialization. A doctor in training is given responsibility for a diverse group of customer companies, and the rehabilitation period included in the specialization in occupational health can be performed at Terveystalo’s in-house outpatient rehabilitation clinics in six locations. In addition, we offer the majority of other phases of specialization (see graph below).

In addition, specialization in general medicine is increasing. With the integration of Attendo Health Services, our public services have expanded, and therefore, we increasingly provide opportunities for specialty training in general medicine. Physicians working in Terveystalo’s outsourcing services have excellent opportunities for obtaining diverse high-quality training. Specialization in general medicine can also include an occupational health period that gives a good overview of both

occupational health and private healthcare. In addition, the health center service associated with all specialization training and some of the different specialties’ hospital work services can be performed at Terveystalo.

DIVERSE CAREER PATHS FOR ALL PHYSICIANS

Lifelong learning and self-development are essential parts of being a physician. This is why it is very important to support physicians in career paths other than specialization.

Our annual medical convention provides physicians with professional training, and our diverse career options offer extensive opportunities for development as well as the possibility to focus on work appropriate for each physician. At Terveystalo, a general practitioner can work in more than ten different positions, ranging from on-duty tasks in public services to illness-related appointment work in occupational health. In addition, with us one can also profile as a chat or sport physician, for example.

As the physician supervisor plays an important role in our work, we also want to train our experts in diverse managerial tasks. In addition to these, physicians can engage in administrative development work.

Research and related career paths are also growing at a rapid rate. In the future, the network will offer physicians who are looking for a diverse and comprehensive career path with even greater opportunities.

CUSTOMERS

IMPROVING THE CUSTOMER EXPERIENCE

We continued developing the customer experience at Terveystalo in 2019. Our new operating method ensures that the customer does not deviate from the care pathway. Our investments in digital services further enhance convenience.

Siina Saksi, Anu Pelkonen, Sari Tefke

OUR NEW OPERATING METHOD ENSURES THAT OUR CUSTOMERS BENEFIT FROM UNINTERRUPTED CARE PATHWAY AND FEEL CARED FOR

At Terveystalo, we aim to stand out by providing an excellent experience – in all of our channels. Our aim is to efficiently provide a smooth and uncomplicated, yet humane and empathic service experience. Our persistent efforts have produced good results, and we are exceedingly proud to have achieved our highest-ever Net Promoter Score (NPS) in 2019.

An excellent customer experience requires continuous development efforts, and we work diligently to strengthen our service culture. Our successes in 2019 include our new operating method, which aims to ensure that no customer ever leaves Terveystalo without knowing their next steps. In order to promote this, we have created two new operating models for our units.

The service expert helps the arriving customer by advising and guiding them to the right place. The care coordinator ensures that the customer receives full care after the appointment; they assist in scheduling a follow-up appointment and make sure that the customer knows who is responsible for the subsequent steps. The customer service center also assists by calling the customer if they have not booked a follow-up appointment.

Our new operating method has produced excellent results. Of the participating units, 75% increased their NPS. The customer service center also succeeded excellently in scheduling follow-up appointments.

Our employees recognize the importance of the change, and we will implement the new operating method at all Terveystalo units during 2020. We will provide varied support to the units to manage the change.

VERSATILE DIGITAL SERVICES ENHANCE CONVENIENCE

During 2019, we continued investing in digital services. We improved the resources of our customer service center and reformed the private customers’ online appointment system to strengthen user orientation.

Moreover, we have renewed the Oma Terveys application and its user interface. New features have also been added to the application. For example, customers of public services now receive mammography results without delay via the application, faster than through My Kanta. This has significantly increased the application's number of users.

NEW NPS CUSTOMER ENCOUNTER POINT MEASUREMENTS

We primarily measure the quality of customer experience using the NPS metric. We collect feedback by means of SMS- and browser-based surveys and we are continuously adding NPS measurement at new

CUSTOMER EXPERIENCE DEVELOPMENT

HOSPITAL SERVICES

89.2 NPS

Respondents to the measurement 1–12/2019, 21,360

ORAL HEALTH

78.0 NPS

Respondents to the measurement 1–12/2019, 44,360

MAMMOGRAPHY SCREENING

88.3 NPS

Respondents to the measurement 1–12/2019, 46,873

APPOINTMENTS

72.5 NPS

Respondents to the measurement 1–12/2019, 161,707

THE OCCUPATIONAL HEALTH SPECIALIZATION PATH AT TERVEYSTALO

FRAMEWORK TRAINING								
HOSPITAL SERVICE	HEALTH CENTER SERVICE	OTHER SERVICE	OCCUPATIONAL HEALTH RESIDENCY, 24 MONTHS	REHABILITATION PERIOD, 6 MONTHS	TRAINING SUPPORTING THE SPECIALTY, 12 MONTHS	TTL* 6 MONTHS	OCCUPATIONAL HEALTH CARE SPECIALIST	
STAFFING SERVICES			Entire period at Terveystalo • Own designated senior physician • Regular trainer meetings • Period trainings • Regional specialization trainings	Terveystalo's in-house outpatient rehabilitation clinic in six locations	Staffing services (e.g. physiatry, internal medicine, surgery)	*Finnish Institute of Occupational Health	<ul style="list-style-type: none">• Customer responsible occupational health physician• Major customer physician• Responsible occupational physician• Specialty/exposure-specific expert• Trainer physician	
OUTSOURCING								
PRIVATE CLINIC								
OCCUPATIONAL HEALTH CLINIC								
Applications, September and February	Occupational health clinic → a maximum of 6 (1/month) work experience points in the selection for specialist training			ADDITIONAL PART-TIME WORK THROUGHOUT SPECIALIZATION				
• Starting points				• part-time work during the day				
• Motivation letter				• evening clinic				
• Interview				• evening and night on-call work				

customer encounter points. In 2019, we began to measure NPS in the new private customers’ online appointment booking system, as well as in the browser-based Oma Terveys (My Health), and in the revised Oma Terveys mobile application.

We analyze our NPS feedback by using AI-driven Lumoa analytics to reveal which aspects of our service chain have positive and negative effects on the customer experience. We process feedback at the group and clinic levels to identify our strengths and weaknesses in order to support systematic development.

In addition to NPS feedback, we receive direct feedback from customers verbally and in writing. Direct feedback is very valuable to us, and we manage it using a uniform process. We reply to the customer as quickly as possible and monitor the progress of feedback processing compared to the set target times at all organizational levels. From the beginning of 2020, we will also begin to analyze spontaneous feedback using the Lumoa impact analysis software.

CUSTOMERS

EFFECTIVE DISABILITY MANAGEMENT REQUIRES INFORMATION

Work that is left undone is expensive to Finnish businesses; therefore, it pays to invest in disability management. Terveystalo’s targeted Occupational Health Examinations deliver care to the right people. The advantages have proven to be significant.

Maaret Helintö & Unto Palonen

WORK LEFT UNDONE COSTS FINNISH BUSINESSES 3.6 BILLION EUROS A YEAR.

Work that is left undone is expensive for Finnish businesses. Our annual Tekemättömän työn vuosikatsaus¹ (Annual review of work left undone) indicates that disability costs Finnish businesses an average of 6.13% of their total payroll, or approximately EUR 2,558 per person-year. At the level of the entire Finnish business sector, the annual total cost is EUR 3.6 billion.

The annual review of work left undone is based on our Cost Analysis service. It provides companies and organizations with an overview of the key costs involved in work not carried out and their trends. The Cost Analysis helps in comparing the cost level of the particular organization with general and industry-specific cost levels and makes it easier to identify potential savings. Information enables more efficient management of work ability and occupational health.

TARGETED HEALTH EXAMINATIONS IDENTIFY RISKS TO WORK ABILITY

Effective disability management requires that organizations know what kinds of risks related to work ability they are managing. With targeted health examinations, we survey the organization’s health and work ability risks and obtain information to support management efforts. Once we have determined the level of the risks to occupational health, our occupational health team can plan effective operations together with the customer. Our aim is to manage and minimize the risks. It is also reasonable and efficient to perform health examinations in a targeted way, offering what is needed based on the risks. In practice, the mindset of "everything equally to all employees" with relation to health examinations is becoming obsolete.

An electronic scientifically validated health survey is always attached to our occupational health examinations, completed as the employee’s self-assessment. Using the health survey, we can identify health risks and any risk of disability. Through it, we can also allocate measures, particularly to those with significant risks. By the end of 2019, Terveystalo had completed over 145,000 health surveys.

SIGNIFICANT VALUE FROM OCCUPATIONAL HEALTH EXAMINATIONS

Scientific research has shown that the predictive ability of our health survey is very good. Those persons whom the survey predicted to be at risk of disability² had four times as many sickness absences over a year than those with no risks of disability³. Those same persons' risk of permanent disability, on the other hand, was more than ten-fold in six-year follow-up. Occupational health examinations that were targeted based on the health survey were monitored for a year. The

advantages were significant: there were 35% fewer sick days, and healthcare costs were EUR 180 lower per person^{4,5}. A more advanced analysis of the results additionally showed that the cost of preventing one sick day is EUR 10–54.⁶

MY HEALTH PLAN SUPPORTS WELL-BEING IN THE LONG TERM

Influencing health behavior requires goal-oriented action. A comprehensive personal digital plan, Oma Suunnitelma (My Plan), is prepared for each employee who undergoes a health examination at Terveystalo to support work ability. The plan specifies the targets promoting and maintaining work ability and their follow-up. The interactive plan is future-oriented, encourages action, and ensures that the health examination is not a random event, but instead supports the employee’s lifestyle changes in the long term – ideally throughout the employee’s career.

The customers use the plan via the mobile and web application, and through it, can also keep in touch with our professionals remotely. By the end of 2019, Terveystalo had already prepared more than 200,000 My Plans. Terveystalo’s occupational healthcare team reports to its customer organizations on the most common objectives set in the organization’s health examinations, as well as on how the personnel are proceeding, reported at the group level, toward the set goal.

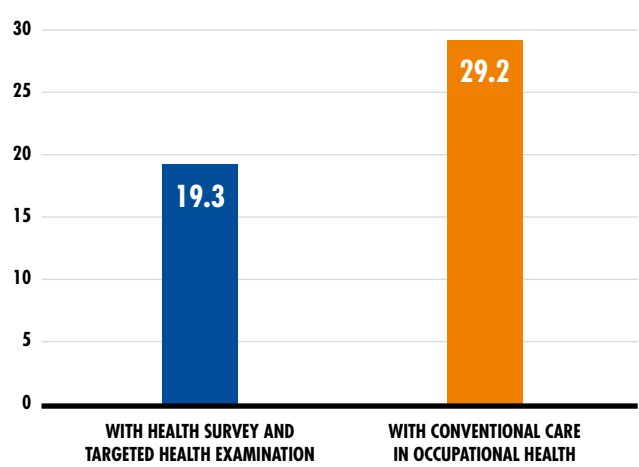
AI HELPS WORK ABILITY MANAGEMENT

Artificial intelligence (AI) supports work ability management. Our Etydi 360 system helps our healthcare professionals identify the population’s health and work ability risks. The AI-based Etydi uses more than 120 algorithms to combine data generated from appointments with, for example, laboratory results, the patient’s own data and data from the Health Survey.

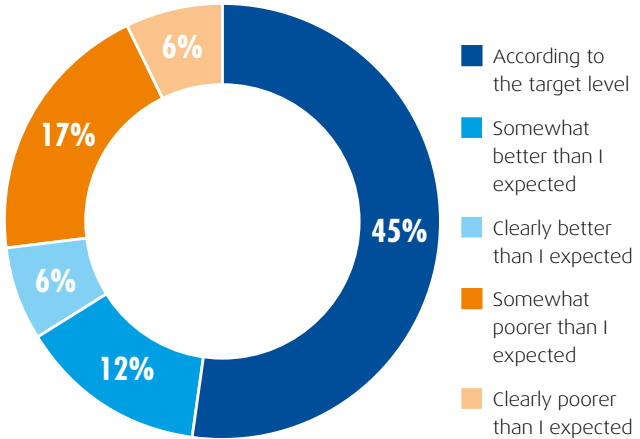
Our system screens the employee population for even weak signals of disability, based on which we can target measures to the right people. AI also combines the results of the Health Survey to the data it collects. Combining the data provides good visibility into the organization’s risks and ability to influence. Terveystalo’s occupational healthcare team provides the organization with information including proposals concerning how to invest in controlling the risk factors.

We aim for sustainability, transparency of healthcare, and the promotion of patient orientation in everything we do. For this reason, in 2019, we became the first health service company to develop and publish an AI Code of Conduct. We have committed to comply with this Code.

SICK DAYS DURING 12 MONTHS OF FOLLOW-UP



MONITORING OF THE PROGRESS OF MY PLANS



WHY DOES IT PAY TO IDENTIFY RISKS?

TOGETHER, THE HEALTH SURVEY AND ARTIFICIAL INTELLIGENCE IDENTIFY HEALTH RISKS TO WORK ABILITY. SHOWN BELOW ARE SELECTED RISK FACTORS AND SICKNESS ABSENCES FOR ALL TERVEYSTALO CUSTOMERS IN COMPARISON TO THE AVERAGE FOR TERVEYSTALO OCCUPATIONALHEALTH CARE CUSTOMERS.

HIGH RISK RELATING TO SLEEP AND ALERTNESS Sickness absence rate of employees in this group increases by 20%.	HIGH RISK IN WELL-BEING AT WORK Sickness absence rate of employees in this group increases by 89%.	BACK PAIN RISK IDENTIFIED Sickness absence rate of employees in this group increases by 87%.	HIGH RISK OF SUBSTANCE ABUSE Sickness absence rate of employees in this group increases by 20%.
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WITH GOOD CARE, ABSENCES CAN BE REDUCED TO THE SAME LEVEL AS THE REST OF THE WORKING COMMUNITY

¹ www.terveystalo.com/fi/Tyoterveys/Palvelut/Tekemattoman-tyon-kustannukset/
² Pihlajamäki et al: BMJ, 2019; 9: e025967
³ Pihlajamäki, M et al, sent for publishing
⁴ Taimela S, et al. OEM 2008; 65: 236–41
⁵ Taimela S, et al. OEM 2008; 65:242–8
⁶ Verbeek J, et al. SJWEH 2010; 36:305–12

CUSTOMERS

THE WORLD’S MOST ADVANCED DIGITAL SERVICES OFFER HEALTHCARE EVERYWHERE

At Terveystalo, a physician, nurse or therapist can also provide consultations remotely – via video or chat. Our services expanded in 2019, and our customers can now use our new mobile application to log in to chat and video consultations without an appointment, or take advantage of pre-scheduled video appointments or our secure messaging service.

Riina Monthan, Annette Kainu

VIDEO CONSULTATIONS WITH HEALTHCARE PROFESSIONALS ALSO BY APPOINTMENT

Terveystalo has the largest network of any healthcare service company in Finland. Our diverse remote services significantly enhance the availability of our services.

During 2019, we invested in our remote appointments and provided our customers with the new Oma Terveys (My Health) application, specifically designed to take video and chat appointments into consideration. Video appointments have become an essential part of the activities of all experts. They are used by general practitioners and specialists, nurses, and therapists from different fields. Video appointments are particularly well suited for mental health and nutrition therapy services and follow up with our experts.

Thanks to the revised online booking system, private customers can now schedule appointments with professionals as video appointments or as conventional appointments at the clinic. Video appointments give all Finns access to Terveystalo’s professionals in different fields along with their special expertise, regardless of geographical location.

ASSISTED VIDEO APPOINTMENT

In 2019, we also piloted joint video appointments with a nurse and physician. These make providing doctor’s services to smaller localities possible, and, for example, offer a specialist’s remote consultation in conjunction with a diabetes patient’s annual check-up with a diabetes nurse. In our new operating model, the patient visits a Terveystalo clinic to see a nurse as agreed. Before the doctor’s appointment, the nurse often interviews the patient and performs basic examinations. When the physician joins the appointment via video, the nurse assists the physician in examining the patient using remote diagnostics equipment. During an assisted remote appointment, the physician can, for example auscultate heart and lungs, assisted by the nurse.

HIGH-QUALITY SERVICES EVERYWHERE THROUGH VIDEO APPOINTMENTS

With video appointments, we can adjust the supply and demand of our services and provide physician and therapist services in areas where services would not otherwise be as extensively available. We use digital services to provide healthcare and occupational healthcare across Finland with uniformly high quality.

Video appointments also increase the patient’s freedom of choice: they can decide themselves if they want a video appointment or

prefer to visit a clinic. By saving the time and effort of employees and employers, video appointments make busy people’s day-to-day lives easier while also reducing their carbon footprint. In fall 2019, we also introduced chat and video appointments to the health points of OLO-Apteekit pharmacies. There, the patient can have a Terveystalo remote appointment with a customer workstation without needing their own remote device – conveniently when visiting the pharmacy.

Terveystalo’s professionals have been very satisfied with the video appointments as they provide flexible work opportunities and a new kind of a direct patient contact. Both physicians and patients have positive experiences of video appointments. The focus on the patient has improved, and issues have been dealt with even better than in physical encounters. Up to two-thirds of patients also give feedback immediately after the appointment, which motivates professionals.

Even though the development of video appointments has been astonishing, we are still taking our first steps. In 2020, we will continue to expand our service portfolio and increase awareness of video appointments. In the future, it will be possible to manage an increasing share of patients remotely.

CHAT APPOINTMENTS HAVE ESTABLISHED THEIR POSITION

Terveystalo’s Doctor Chat 24/7 has established its position among our customers in the past four years, and we already have around 15,000 chat appointments a month.

With the chat, a physician can be contacted very quickly, on average within less than 7 seconds 24/7, anywhere in the world. The Doctor Chat appointment can resolve many common ailments, such as eye infections, allergy symptoms, urinary tract infections and rashes, as text-format communication can be supplemented with images, and if necessary, the physician can also refer the patient to laboratory or imaging. In addition, the Doctor Chat can assess the need for care and further examinations and their urgency, as well as guide the patient in seeking further treatment.

Since May 2019, private customers have been able to have video appointments with general practitioners without scheduled appointments through the Doctor Chat 24/7 service. Occupational health customers are able to use this new service starting from January 2020.

The prescription renewal service allows patients to renew their prescriptions easily through chat appointments. At the same time,



the physician assesses the need for controls and guides the patient to the required follow-up examinations. As the service functions in real time, the customer can use the service while visiting a pharmacy, for example.

The number of Nurse Chat 24/7 service appointments is also increasing. Our trained nurses carry out treatment needs assessments and give guidance on self-care, the use of over-the-counter medication and offer, for instance, traveler and vaccination guidance. If the customer’s symptoms necessitate an assessment by a physician, the nurse can forward the patient to the Doctor Chat appointment or book an appointment with a physician.

In the Mielen Chat (mental chat) 24/7 service for occupational health customers and Mielen Sparri service, we offer low-threshold mental well-being services. Our services function as early support in troublesome situations. Mielen Sparri is also available to private customers via the Nurse Chat 24/7 service.

NEW SECURE MESSAGE SERVICE FOR OCCUPATIONAL HEALTH CUSTOMERS

During 2019, we also launched the new secure Messages to experts service for occupational health customers. The service is available both in the new Oma Terveys application and on our website. In the Messages to experts service, employees can contact their designated occupational health teams through our messaging service, which resembles email but is secure. The aim is to ensure the continuity of care, with the designated occupational health team available to the employee also between appointments, with a low threshold.

SOCIAL ROLE

PUBLIC SERVICES GUARANTEE EQUAL CARE

Lauri Korkeaoja, Krista Lamminen, Niina Hätinen, Jarmo Kantonen

OUTSOURCING HELPS IMPROVE AVAILABILITY OF HEALTH CARE SERVICES

In recent years, the public sector has been grappling with the issue of ever-growing queues. The Finnish Government wants to enable access to care within seven days. The objective itself is positive, but at least for now, the toolkit of means to achieve it is insufficient. One option is to turn to outsourcing.

According to the Finnish Health Care Act, the public sector can provide public services on its own or by outsourcing them to the private or non-profit sector. Terveystalo is one of the largest private providers of outsourced health care services. In the last five years, services for the public sector have been our largest area of expansion. As a result, we now offer the most extensive range of services out of all health care companies in Finland. Pyhtää and Kouvola are two good examples of our outsourcing services.

OUTSOURCING DRIVES COST-EFFICIENCY AND PROMOTES NON-DISCRIMINATION

The level of quality ought to be the same in public and private services. Nevertheless, when producing public services, the main emphasis is on fulfilling the contract, while also striving to exceed the promised level where possible. Outsourcing ensures that public services can be provided in an equal and cost-efficient way, even in the most challenging locations.

We also strive to provide services quickly. The accompanying graph shows the average access to care at units outsourced to Terveystalo. Our T3 figure, which represents the time to the third available non-urgent appointment with a physician, is 11 days. While we are still shy of our seven-day goal, the time is considerably shorter than in Finland’s major cities at the moment.

GOAL: ENSURE FUNCTIONAL ABILITY AND QUALITY OF LIFE FOR ELDERLY PEOPLE

Terveystalo is engaged in close cooperation with more than 15 cities and municipalities. The company provides a comprehensive range of doctor’s services in primary health care to elderly people living in sheltered housing or in their own homes. Our services cover more than 10,000 customers all over Finland.

The aging of the population is a strong trend that presents a significant societal issue, and we want to do our part to address it. We have many years of experience in providing services for the elderly. This has only strengthened our perception that successful end-of-life care requires multidisciplinary cooperation, a comprehensive health assessment of each elderly customer, and anticipation of acute and emergency situations.

We want to support municipalities in meeting the growing demand for services. For our part, we are committed to working together to find even better ways to improve ability to function and quality of life among the elderly in Finland. In the customer satisfaction survey carried out on our partners in 2019, we received a national score of 2.6/3.

REMOTE APPOINTMENTS BRING THE PHYSICIAN CLOSE IN KOUVOLA

Kouvola has outsourced Marjoniemi health center operations to Terveystalo. The health center uses Terveystalo’s remote services in the treatment of, among other ailments, diabetes, cardiovascular disease, asthma/ COPD, as well as cardiac insufficiency patients.

If necessary, a physician’s remote video appointment can be attached to check-up visits with a nurse. At the appointment, the physician can, for example, auscultate heart sounds and lungs or examine the patient’s ears, pharynx, skin, or feet with the equipment in the nurse’s mobile care case, and then prepare a plan for further treatment.

The operating method allocates resources reasonably and brings a physician close, even if the physician is hundreds of kilometers away. Remote appointments thereby save the patient time and are also good for the environment, eliminating the need to drive long distances. The balance of care also remains good.

Patient customers are satisfied with their care. This is indicated by fully booked appointments.

CUSTOMER SATISFACTION 4.81

*customer satisfaction study 2018 Corporate Spirit, scale of 1–5

PYHTÄÄ BUILDS WELL-BEING FOR RESIDENTS AND THE MUNICIPALITY

Pyhtää outsourced its social and health services in 2015. Terveystalo will be responsible for providing services to the residents of Pyhtää until the end of 2024. In full outsourcing, the service organizer, municipality, or joint municipal authority outsources all of its social and health services to a private service provider. Pyhtää was motivated to cooperate by the desire to guarantee diverse high-quality services close to the residents and to keep costs under control in a situation where nationwide social and health service reforms keep on continue to persist.

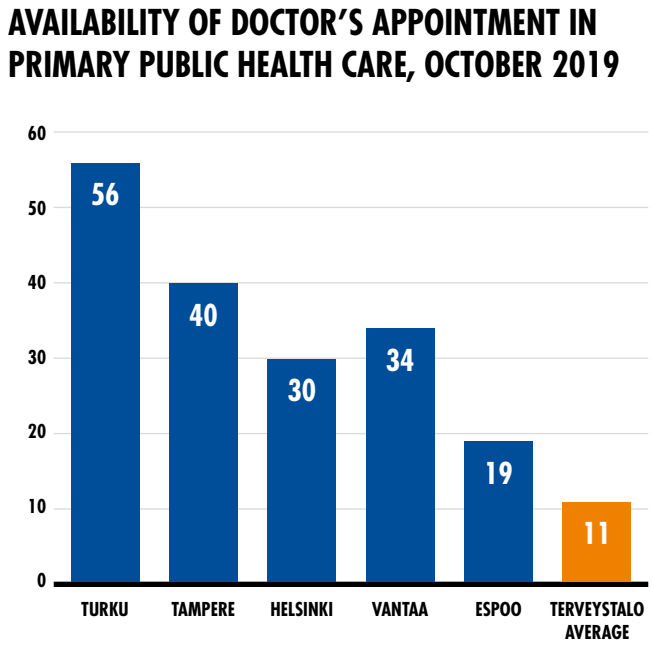
Social and health costs take up approximately 50% of Pyhtää’s budget, and the municipality wants to get the maximum value for its funds. In addition to the guaranteed service, money also returns to the municipality, as Terveystalo employs 40 professionals in Pyhtää and purchases many services from entrepreneurs in Pyhtää and the surrounding Kymenlaakso region.

The municipality's residents have rated their customer satisfaction with social and health services at close to 5 each year, on a scale of 0–5 (4.81/5 in 2018). Families with children, for example, have been provided with the well-being clinic operating model similar to the current family center model already since 2015. In addition to the residents of Pyhtää, 100 people from other municipalities have chosen the municipality’s health center as their personal health center. Evening appointments are open until 8 p.m. The use of specialized medical care and coordinated accident and emergency services has decreased in the municipality. On the other hand, specialized medical care is also quickly available with Terveystalo’s network and expanded service offering, if necessary.

At the beginning of 2019, Pyhtää joined the Kymsote municipal joint authority for social and health services in Kymenlaakso, comprising six municipalities. Pyhtää only had one condition for joining the voluntary merger: that the municipality would be able to maintain its social and health services at the level built with Terveystalo and could also continue to build them with Terveystalo.

UNIFORM PRACTICES ARE THE KEY TO SUCCESSFUL INDUCTION TRAINING

Successful induction is a prerequisite for high-quality care and job satisfaction. For this reason, we have introduced new uniform practices for induction training, developed by our personnel services. When it comes to induction training for physicians, a minimum of three hours of time free of patient care work should always be reserved for both the physician providing the training and the physician receiving it. The induction training should primarily be given by the physician in charge of the on-call roster. A 38-point checklist has been compiled to ensure the high and uniform quality of induction training. If the physician requires further support, they will be offered colleague shifts where they work as an extra resource. When experiences from outsourced physician services are collected, the best practices for orientation can be applied anywhere in the organization.



SOCIAL ROLE

EFFECTIVE CARE OF MENTAL HEALTH DISORDERS YIELDS RESULTS

Early identification and appropriate treatment of mental health disorders save costs and reduce mental suffering. The mind recovers with support – the impacts not only concern the individual, but also their family and the entire workplace.

Tuija Turunen, Antti-Jussi Ämmälä, Anita Riipinen

The recent FinnTerveys study on the health of the Finnish population by the Finnish Institute for Health and Welfare (THL) finds that mental health disorders, especially anxiety and depression, have increased in Finland. The disorders are among the most common ailments of people of working age, with one in two adults suffering from them at some point in their lives. Everyone has slight symptoms, such as stress and strain.

The phenomenon can also be seen in Terveystalo’s statistics, showing that diagnoses of mental health disorders increased by one-fifth between 2016 and 2018. According to the WHO, the number of disorders has also increased in the rest of the world.

Terveystalo had more than 250,000 appointments relating to mental disorders in 2019. The most common reason for the appointments was depression, diagnosed in 48% of the appointments. Mental health disorders are the biggest factor causing sickness absence, and each year, they result in almost 7600 Full-time equivalent (FTE) units of sick leave among Terveystalo customers alone. The same can be seen in Kela's statistics: mental health-based sickness allowance periods have increased.

The actual human costs of the disorders are even higher, as depression and anxiety typically affect all areas of life extensively, such as the well-being of people close to the person and the working community.

EFFECTIVE CARE WITH BRIEF PSYCHOTHERAPY

Mental health problems can be treated effectively, and with treatment, the ability to work and function usually recovers. The faster we commence effective care, the better the outcome. To start treatment quickly, the disorders must be identified as early as possible. It is also essential to prevent the emergence of the disorders by offering low-threshold services when the mind is still only strained and the symptoms are slight and it is not yet an actual disorder.

We offer psychotherapy according to the Current Care Guidelines for the treatment of actual mental health disorders, such as depression and anxiety. Occupational healthcare agreements increasingly include an opportunity for brief psychotherapy, which is active and target-oriented work together with experienced psychotherapists. A referral from a physician is required for brief psychotherapy, and the physician also receives feedback on their patient after the period of psychotherapy is over.

In most mental health disorders, occupational health brief psychotherapy is at least equal to medication in terms of impact. Combining these treatment methods is the most effective treatment. Our systematic follow-up of the impact of treatments indicates that the

patients’ symptoms have been alleviated and that they have recovered their ability to function.

Corporate customers have also been very satisfied with our mental health and well-being services. SOK, for example, actively deployed means to support mental well-being, and sick leaves caused by mental health shortened considerably. Matti Räsänen, HR Consultant at SOK, says that the company has also achieved significant financial savings.

LOW-THRESHOLD DIGITAL SERVICES HAVE GAINED POPULARITY

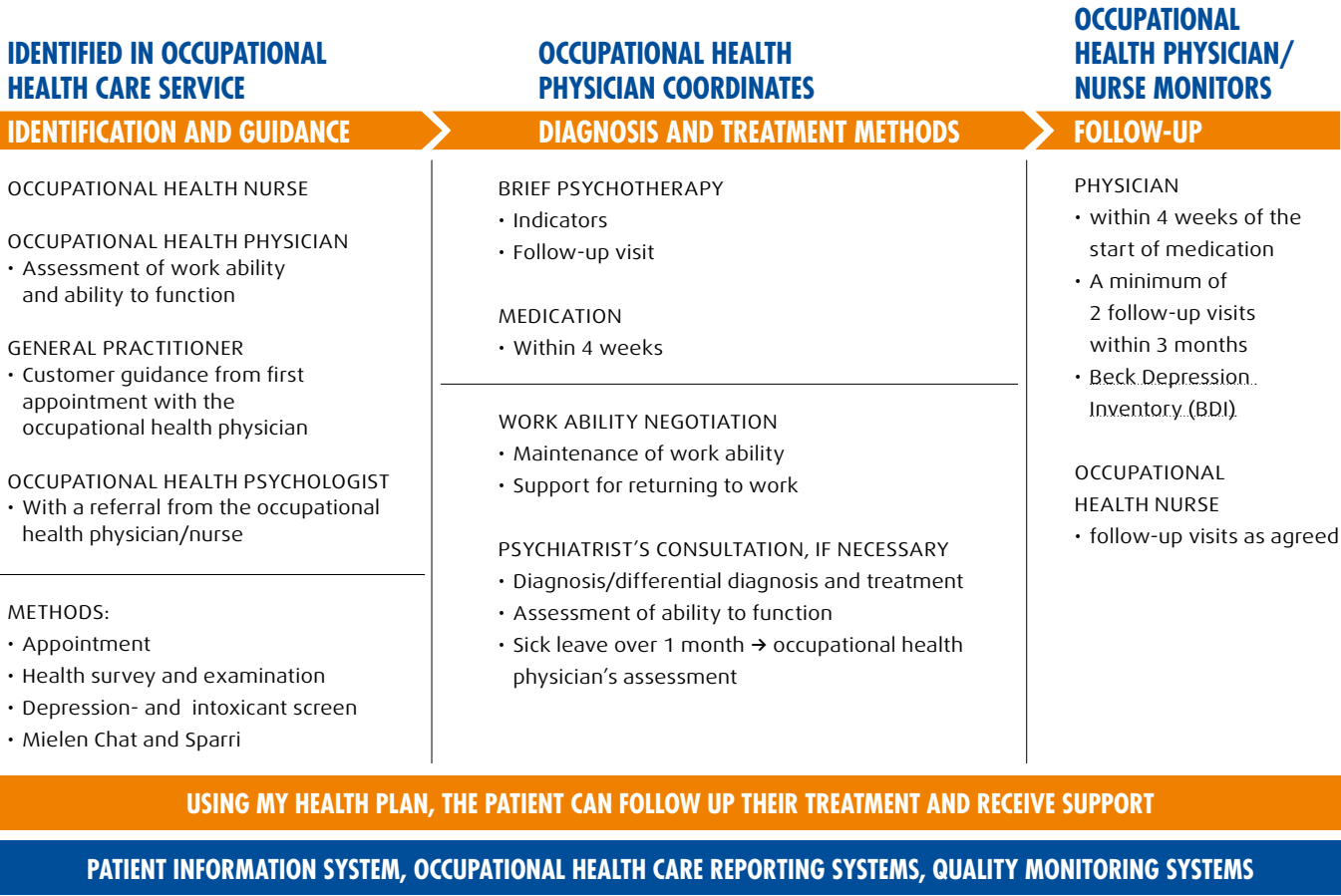
Terveystalo has also developed low-threshold services, providing help for coping with day-to-day life quickly and easily, and when it is most suitable. The digital Mielen Chat (Mental Chat) and Mielen Sparri (Mental Sparring) services enable, contact with a trained healthcare professionals. In the Mielen Chat service, open 24/7, our nurses schedule appointments with Mielen Sparri, which is a video appointment service with psychologists or psychotherapists. If necessary, we forward the customer from Mielen Chat and Mielen Sparri to occupational health services. The service provide confidential support, and it is up to the customer to decide on their necessity.

Mielen Chat and Mielen Sparri have been in use since fall 2018. Their use has increased all the time, and all contacts have been necessary according to a professional’s estimate. The majority of the contacts have been associated with perceived stress or a difficult situation in life.

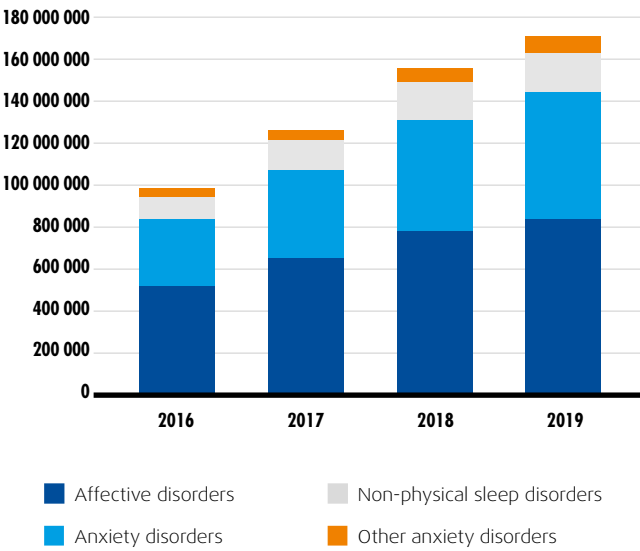
SMOOTH CARE PATHWAYS ENSURE HIGH-QUALITY CARE

Good care of mental health disorders requires smooth care pathways in order to guarantee and develop the disorders' identification, treatment, and follow-up. Terveystalo has already specified the care pathway for treating a healthcare customer’s depression, and we will deploy care pathways for the other most common mental disorders during 2020. We monitor the quality indicators associated with the depression care pathway and the achievement of their objectives. The aim is to ensure that as many of our customers as possible have timely and effortless access to effective care according to the care guidelines. We will continue to develop high-quality mental health services. Furthermore, as it is a highly relevant topic of our time, we will raise the subject of mental health in societal discussion. Public debate decreases the stigma still associated with mental health disorders and can also lower the threshold for seeking care in time. By supporting the working-age population, we can influence the attitudes and mental well-being of future generations.

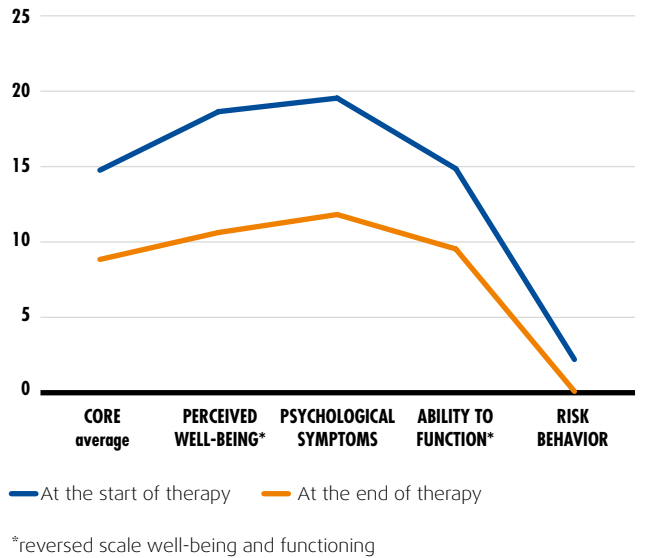
TREATMENT PATH FOR DEPRESSION IN OCCUPATIONAL HEALTHCARE



MENTAL HEALTH AND BEHAVIOR DISORDERS, SICK LEAVE DAYS BY ICD-10 GROUPS



THE CHANGE IN PSYCHIATRIC SYMPTOMS AND FUNCTIONING DURING BRIEF PSYCHOTHERAPY, CORE-OM



Source: Terveystalo patient information system

QUALITY MANAGEMENT AND INDICATORS

We are committed to continuous development of Terveystalo's high-quality operations. Assuring quality requires us to have clear processes, guidelines, and responsibilities, as well as continuous measurement. Patient safety and clinical quality management are at the center of our quality management efforts.

The aging of the population is a strong trend that presents a significant societal issue in Finland. We want to do our part to address it.



QUALITY MANAGEMENT

Quality management is a continuous development effort in which everyone takes part. It requires clearly defined responsibilities, operating methods and indicators – and increasingly, technology as well. The goal is an excellent and smooth customer experience, efficiency, and effective clinical quality.

Sari Riihijärvi, Laura Mäkelä, Eeva Nyberg-Oksanen, Petri Bono

QUALITY MANAGEMENT GUARANTEES A UNIFORM SERVICE EXPERIENCE

At Terveystalo, we are committed to the high quality and continuous development of our operations. Quality-related efforts are guided by our values – expertise and caring – as well as by the healthcare industry’s joint principles, guidelines, and our company’s Code of Conduct.

In quality management, we rely on our quality triangle: in our work, we aim at high clinical, experience-related, and operational quality. Furthermore, we have identified a fourth dimension to our quality work: expert experience. In 2020, we will increasingly invest in providing our employees with the best working conditions possible. This will also guarantee excellent customer service.

Our customer is at the very core of our quality efforts. By taking care of our quality, we can offer the individual a safe and uniform service experience, regardless of which of our clinics they visit. From the point of view of our professionals, on the other hand, a well-organized working environment guarantees that they can focus on their actual work. Working between different units also becomes easier once the operating methods are uniform everywhere.

Quality work involves everyone. It is about operational management, and it is present in everything we do. Ultimately, everyone at Terveystalo is responsible for meeting the goals set for quality in their day-to-day work.

QUALITY MANAGEMENT REQUIRES ALLOCATION OF RESPONSIBILITIES

In addition to shared, well-communicated rules, successful quality work also relies on clearly defined roles and responsibilities. We manage quality and patient safety at all organizational levels. Our business functions are responsible for the quality of their operations. In addition, we have a joint group-level quality management steering group that prepares the nationwide quality guidelines, monitors the quality indicators, and decides on nationwide development measures relating to quality.

Region-specific multidisciplinary quality management teams are responsible for the deployment of the steering group’s guidelines and for ensuring the quality of day-to-day operations. During 2019, we clarified the structures for regional quality management. In addition, we invested in supporting the quality management teams and training in risk management and root cause analysis methods. All members of the quality management teams are responsible for developing the quality of the operations of the clinics according to their roles.

OPERATIONS WERE HARMONIZED DURING THE ATTENDO INTEGRATION

In 2019, our quality work underwent changes after Terveystalo acquired Attendo’s health services. We reformed our organization at

the same time. The basis of our quality work is strong, and as a result, the change was managed in a thorough manner.

Terveystalo’s integration model includes quality-related visits, and during 2019, 28 visits were made to newly acquired clinics. During the quality visits, we reviewed operating models relating to patient safety, data protection, aseptics, and medication supply together with the clinics, as well as any related needs for development. We also collected good practices from the clinics and assessed possibilities for adopting them at the group level.

We will continue the integration work in 2020 to ensure that all integrated clinics operate in accordance with Terveystalo’s models.

WE MEASURE QUALITY IN DIVERSE WAYS

Ensuring quality requires continuous assessment. We are a trailblazer in this respect, and our aim is to produce transparent information that fulfills international benchmarks.

Our indicators include

- customer feedback
- clinical quality indicators
- cornerstone indicators for patient safety (including hazardous incidents, official requests for corrective action by the authorities, surgery-related infections, etc.)
- coordination reports
- internal and external qualityaudit reports (including process deviations, deviations that might affect patient safety, data security deviations)
- monitoring of the corrective actions relating to deviations and their impacts
- observations from internal quality visits
- internal audits and risk assessments

Our key indicators are the same everywhere, providing us with comparable data and allowing us to identify the best practices. Furthermore, we learn from one another. For example, everyone at Terveystalo can review the clinic-specific audit results and the workflow of their measures in our electronic system, making it possible to use the information more extensively. During the year, an accredited auditor conducted audits of 24 clinics, two regional management teams, the Biobank and group management. A total of 17 internal audits were conducted. The external auditor identified the effectiveness of the quality management system and our internal audits as Terveystalo’s strength. We continuously develop our assessment methods. During 2019, we expanded our Gemba audit model. Based on the model, an internal auditor accompanies the customer, with their permission,

throughout the appointment. In a similar manner as a mystery shopper, they observe the customer experience, the success of operating processes and compliance. Our new customer guidance and good care model helps to uphold our standards for quality as well, by ensuring that the customer does not depart from the care pathway.

In 2019, we also reformed the model for monitoring internal and external audit deviations, with the aim of at higher efficiency and transparency. With the reform, it will be easier for us to identify the root causes of deviations, ensure the completion of measures, and learn about their impacts throughout our organization.

THE MANAGEMENT OF PATIENT SAFETY AND CLINICAL QUALITY IS AN ESSENTIAL PART OF QUALITY EFFORTS

In addition to uniform processes, patient safety management is another cornerstone of quality that we continuously monitor, manage, and develop. Deviations are addressed immediately, the root causes are identified, and processes are developed further. We are proud to report that in proportion to the number of appointments, the number of patient injuries is below the national average for the sector.

We have also invested in managing clinical quality in recent years – an effort that is supported by our existing patient safety culture and uniform processes. We continuously develop our medical reporting and obtain information about the effectiveness of our work: in the form of treatment outcomes and compliance with the care guidelines. This information supports us in improving our operations and also requires us to develop our expertise in clinical management.

The management of patient safety and clinical quality requires the allocation of responsibilities, uniform processes, and up-to-date information. Each clinic has designated persons in charge of quality and hazardous incidents as well as a Chief Medical Officer, whose job description we revised in 2019. Clinical quality management is now a central and increasingly important part of the position. At the same time, we have appointed new specialty managers, allowing us to manage clinical quality by specialty and to define specialty-specific quality indicators.

TECHNOLOGY RAISES QUALITY TO A NEW LEVEL

It is of paramount importance that the persons in charge can review the cornerstone indicators of medical reporting and patient safety in real time. During 2019, we developed reporting as well as other digital tools that will take us towards preventive individual treatment.

Among other efforts, we revised the Etydi 360 tool for Terveystalo professionals during the year. Etydi uses data from the patient information system and survey responses, builds indicators of effectiveness based on them, and collects the information for the professional to review. Using Etydi, physicians can, for example, monitor the balance of care of chronic diseases in their patient population, or identify risk patientsand guide them to the correct care pathways.

In addition, we launched the Terveystalo Pro mobile application for professionals. The application was developed to support the professional’s management of their own work, and enables them to view their work shift lists. In time, the application will allow professionals to review laboratory and imaging results, monitor the quality indicators of their own work, and send messages to customers.

The Oma Terveys (My Health) application was also renewed in 2019. It combines the customer’s health information in a single application and also has a feature for booking appointments. Oma Terveys increases the transparency of care. With all of their information stored in one place, Oma Terveys supports customers in taking greater responsibility in promoting their own health. In the best scenario, the customer carries all their relevant data in their pocket.

IN A KAIZEN EVENT, TEAMS LEARN THE SECRETS OF PROBLEM SOLVING

Terveystalo continuously develops its operations, especially by improving day-to-day processes. As part of our development efforts, we have adopted the Lean philosophy and train our experts to become Green Belt experts, who are adept in processes that flow. In 2019, we wanted to include the actual teams doing the work into the process of continuous improvement. Therefore, we trained our Lean Green Belt experts a notch further to become Kaizen Event coaches.

In a Kaizen Event, teams solve their challenges in quick and intensive workshops. After outlining the problem, they define the current state, target state, and the problems to be solved. After this, they agree on the concrete actions to reach the goal.

Two pilot cases were chosen for the Kaizen Event coach training: the Tampere unit and the digital care needs assessment unit. The results have been very promising: for example, the waiting time for customer service in Tampere shortened from five minutes to under three minutes, and the NPS clearly increased.

Terveystalo teams can now invite coaches to help them and their members develop their own work using the Kaizen method. In addition, fundamentals of Lean have been included in our supervisor training. We are firmly advancing on our path to a leadership model where Lean is part of managerial work – every day.

QUALITY INDICATORS

PATIENT SAFETY

Indicator	Target	2017	2018	2019
CORNERSTONE INDICATORS OF PATIENT SAFETY				
Objections vs. visits to a physician*	Lower than national average	0.005%	0.007%	0.009%
Notices of patient injuries vs. visits to a physician*	Lower than national average	0.012%	0.010%	0.011%
Complaints vs. visits to a physician*	Lower than national average	0.0009%	0.0015%	0.0012%
Incident reports vs. visits to a physician*	Lower than national average	0.12%	0.15%	0.14%
Near misses vs. visits to a physician*	Lower than national average	0.07%	0.08%	0.08%
HOSPITAL OPERATIONS				
Use of the WHO checklist in surgery	100%	96.1%	95.8%	97.2%
Infections vs. number of surgical operations	<1%	0.72%	0.58%	0.59%
Complications vs. number of surgical operations	<1%	0.20%	0.30%	0.20%
IMAGING				
Average radiation dose vs. national reference level: • Sinus X-ray/90mGy*cm² • Mammography/1.5mGy	Radiation doses considerably below the benchmark	67 1.1	65 1.1	61 1.1
Sinus X-ray examinations with only one projection (% of total number)	80%	86%	90%	91%
Small children's (0-9y) sinus X-ray examinations	Descending	149	115	111
Small children's (0-9y) chest X-ray examinations	Descending	948	765	821
Lumbar spine X-ray examinations to 10-49 year-old women	1,500	2,305	1,942	1,847
Results from peer review of reports/nothing to add, nothing clinically significant to add	95%	95%	93%	-
QUALITY OF MAMMOGRAPHY SCREENING				
Response speed, cancer observations in the screening population: • screening customer receives a response within 5 normal business days • percentage of malignant tumors found in screening	75%	-	79% 0.64%	77% 0.64%
PHARMACOVIGILANCE (NEW INDICATOR)				
Actual pharmacovigilance inspections/visits	Ascending	55	100	115

*Does not include outsourced units, Rela or missing clinic information

CLINICAL QUALITY

Indicator	Target	2017	2018	2019
COMPLIANCE WITH CARE GUIDELINES				
Referrals to brief psychotherapy for patients with depression and anxiety	10%	-	New indicator	0.8%
Prescribing medicines affecting the central nervous system vs. appointments with physician	Descending	-	4.8%	4.9%
Children's cough medicines	0	3,063	1,928	1,054
EFFECTIVENESS OF SURGICAL OPERATIONS				
Return to work following orthopedic surgery	Decending	91 and 56	90 and 55	84 and 45
Work ability assessment in occupational health following trauma surgery	28 days	55 and 41	52 and 38	46 and 35
Recovery of functional capacity following knee surgery KOOS	Ascending	61->84	60->84	Requires 12 month follow-up
Recovery of functional capacity following shoulder surgery DASH	Ascending	41->89	43->86	Requires 12 month follow-up
EFFECTIVENESS OF OCCUPATIONAL HEALTH CARE				
Share of preventive work	60%	41%	43%	45%
Health examination in which a digital health plan was prepared	Ascending	New indicator	50%	70%
Realization of visits included in the health plan	Ascending	New indicator	68%	46%
Customers' self-evaluations concerning the progress of health objectives	Ascending	New indicator	11,000	18,000
QUALITY INDICATORS OF ORAL HEALTH				
The percentage of patients whose supporting dental tissues have been examined during a check-up visit	95%	-	New indicator	January 20% December 40%
The number of control visits in relation to periodontal treatments	50%	-	New indicator	January 11.1% December 2.5%
The percentage of root canal therapies involving the use of a rubber dam (kofferdam)	75%	-	New indicator	January 16.6% December 28.5%
REMOTE APPOINTMENTS				
Duration of sick leave, % of chats where sick leaves of over 2 days were prescribed	not over 2 days	New indicator	0.20%	0.40%
Prescribing antibiotics (for other than urinary tract infections), % of chats where antibiotics were prescribed	No prescriptions	New indicator	0.01%	0.03%
Prescribing medicines affecting the central nervous system, % of chats where medicines affecting the central nervous system were prescribed	No prescriptions	New indicator	0.1%	0.2%

EXPERIENCED QUALITY

Indicator	Target	2017	2018	2019
CUSTOMER EXPERIENCE				
NPS, appointments	74%	66.90%	70.9%	72.5%
NPS hospital	91%	88.30%	91%	89.2%
NPS oral health*	79%	New indicator	76.50%	78%
NPS mammography screening	89%	New indicator	85.80%	88.3%
Direct feedback, primary response to customer within two normal business days	95%	87%	87.00%	87%
Direct feedback, resolution to customer within five normal business days	85%	74%	85.00%	78%
WheelQ customer satisfaction (scale 1-10)	8.5	New indicator	8	8+
PROFESSIONALS' EXPERIENCE				
Job satisfaction	>90%	88%	92.7%	88%
Well-being (employed)	>90%	80%	92.1%	80%
Well-being (self-employed physicians)	>90%	92%	89.0%	92%

*Does not include units from the Attendo integration

OPERATIONAL EFFICIENCY

Indicator	Target	2017	2018	2019
Percentage of population living within 15 minutes of the nearest clinic	-	>70%	75%	Services are accessible to everyone who has access to internet
Waiting time in appointment booking*	1min	1min 20s	1min 18s	1min 45s
Waiting time in remote appointments	<30s	a few seconds	a few seconds	<7s
Next available appointment T3	1	0.60	0.70	0.99
Next available appointment T3 public services	Descending	-	-	11
Time lapse from imaging to issuing the report X-ray examinations, median MRI examinations, median	Descending	-	rtg: 26min mri: 2t 14min	rtg: 20min mri:1h 59min
Time lapse from urgent imaging to issuing the report X-ray examinations, median MRI examinations, median	Descending	3min	2min 19min	3min 40min
Increase in laboratory offering 9:00 a.m.-noon	Ascending	14%	8%	15%
Increase in laboratory offering noon-4:00 p.m.	Ascending	20%	18%	26%
Increase in laboratory offering after 4:00 p.m.	Ascending	49%	35%	66%
AUDIT DEVIATIONS QTY/AUDIT, AVERAGE**				
Internal audit	-	10	12.5	20
External audit		2.3	2.5	3
PAJA INDICATORS: PAJA IS A DIGITAL TOOL USED TO WORK ON DISCOVERED TARGETS FOR DEVELOPMENT				
Number of users, cumulative	Ascending		2,364	2,863
Recorded areas of development, qty	Ascending	994	898	617
Completed areas of development, percentage	60%	42%	61%	52%

*Additions to the sequence of phone numbers, e.g. special sequences

**Year 2019 includes new, integrated units, that were audited for the first time

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