Capital Markets Day

17 May 2019

Challenges facing public governance and services in Finland
Päivi Nerg, Permanent Under-Secretary for Governance Policy, Ministry of Finance

Pihlajalinna as a partner for a large employer
Tero Pesu, Director, Shared HR Services Nordics and Country HR Finland, Stora Enso

Why is the involvement of a private service provider necessary?
Hannu Juvonen, Specialist, MBA, Pihlajalinna Plc, member of the Board of Directors

Pihlajalinna's origins and business development
Mikko Wirén, Lic.Med., Founder, Chairman of the Board of Directors

Pihlajalinna's outlook and future opportunities
Joni Aaltonen, CEO, Pihlajalinna

Public and private sector service synergies and the customer experience
Teija Kulmala, Head of Business Operations, Pihlajalinna

Pihlajalinna's services in the future
Sanna Määttänen, Head of Service and Product Development

Pihlajalinna

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Pihlajalinna as a partner for a large employer

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Pihlajalinna

Why is the involvement of a private service provider necessary?

The role of the private sector in Finnish social and health services

Hannu Juvonen
Specialist, MBA
Pihlajalinna Plc, member of the Board of Directors

Previous employers: Kanta-Häme Hospital District, City of Helsinki, East Savo Hospital District, Terveysrahasto Oy, Pfizer Oy

The current situation in public pay social and healthcare services

- **Sustainability gap, need to rein in rising costs**
- **Large variation between municipalities**
  - In costs
  - In production volumes
  - In productivity
  - In availability and accessibility
- **Insufficient knowledge and understanding**
  - Of quality
  - Of effectiveness
  - Of the customer experience

The need to reform social and healthcare services

From a focus on cost and performance to a focus on the customer, quality and effectiveness

- Management of treatment and service solutions
- Promoting the health of the population and enabling good quality of life

From being structure-driven to being goal-driven

- The current legislation on social and healthcare services does not prevent reform, but also does not require it to a significant extent

Separating the role of the organiser/client from the role of the service provider

Clarifying the requirements imposed on service providers

- Availability, accessibility, quality, effectiveness, customer experience, costs
- Taking advantage of competition between service providers in service development

Taking regional differences into consideration

Private sector competencies related to social and healthcare reform

- **Capacity to invest**
  - Infrastructure
  - Digital transformation
  - Technology adoption
- **Capacity for change and innovation**
  - Flexible resource management based on customer needs
  - National pool of competencies and resources
  - Flat organisations with efficient decision-making
  - Competition and the profit motive promote innovation
- **Goal-driven and eager to cooperate**
  - Services based on the client's needs and goals

Social and health services reform now

- **All of the tools are available under current legislation**
  - Outsourced services
  - Complete and partial outsourcings
  - Service vouchers
  - Personal budgets
- **Bold structural and cooperation solutions in service production**
- **Making steering at the policy level more goal-driven**
- **Taking advantage of competition and freedom of choice**
- **Enabling as the focus of reform**

Pihlajalinna

Pihlajalinna's origins – how it all began

Mikko Wirén
Lic.Med.,
Founder & Chairman of the Board of Directors
Pihlajalinna Plc

“I would like to see a focus on developing alternatives, studying and comparing different service systems and finding the best solutions. However, the starting point should always be that people are treated equally.”

“One of the biggest problems today is that employees haven’t been looked after as well as they should have been. It’s not just a matter of pay. Above all, it’s about working conditions.”

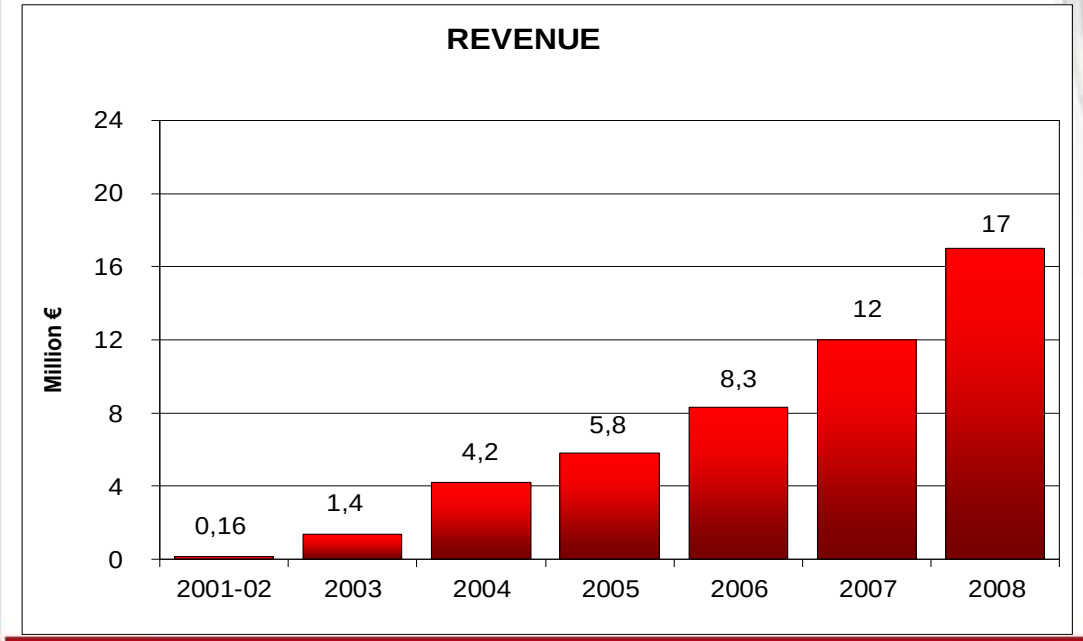
Archiater Risto Pelkonen 2001

”I give my support to Pihlajalinna’s new operating model for primary care in Tampere (Omapihlaja)”

Archiater Risto Pelkonen 2007

Pihlajalinna Group

- **Established** — **October 2001**
- **Revenue in 2009:** — **EUR 20 million**
- **Finland's fastest-growing company** — **2001-2005**
- **Credit rating since 2004** — **AAA**
- **Shareholding of personnel** — **80 %**
- **Shareholding of Terveysrahasto fund** — **20 %**
- **Number of personnel** — **250 (+200)**
- **Measured in terms of revenue in 2008, the 13th largest healthcare company in Finland**



PIHLAJALINNA

PIHLAJALINNA'S MISSION

Pihlajalinna Oy's mission is to **create new and more effective** ways of producing good health through methods that enable a high level of employee wellbeing, patient satisfaction and customer satisfaction

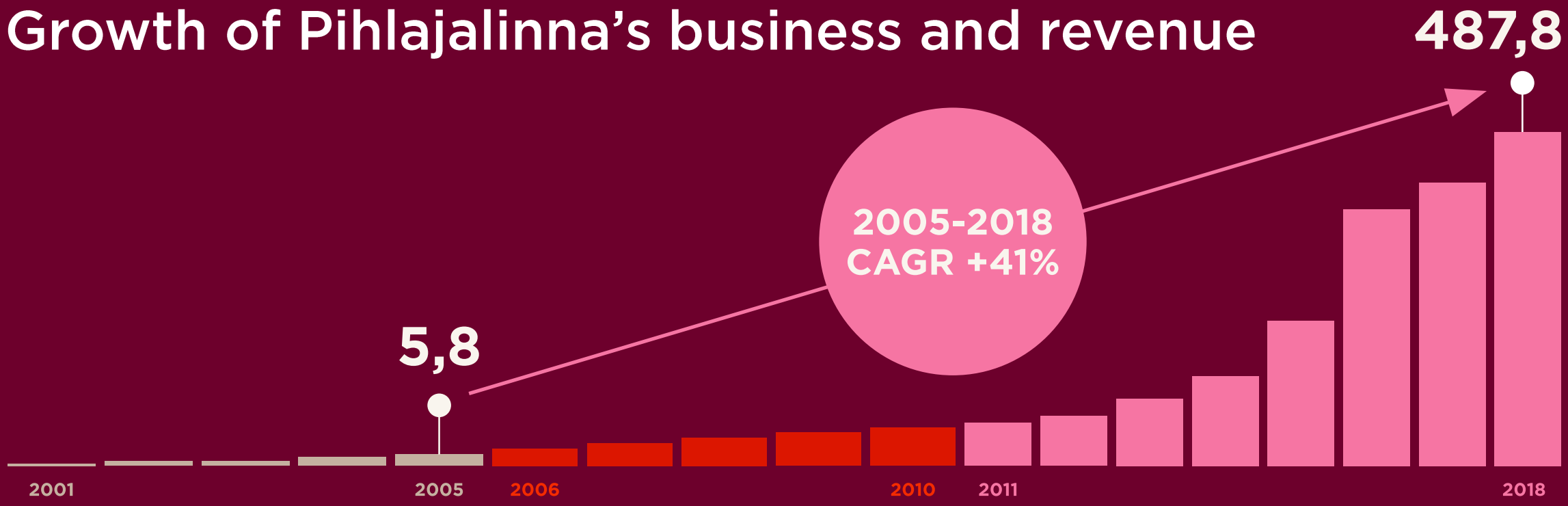
TERVEYSRAHASTO

Terveysrahasto is a private equity fund that develops new customer-friendly operating models in healthcare in cooperation with Pihlajalinna (primary care, occupational healthcare, specialised care)

- Sitra, the Finnish Innovation Fund
- The Central Church Fund of Finland
- The Finnish Cultural Foundation
- The University of Helsinki Funds
- The Foundation for Municipal Development
- The Disabled War Veterans Association of Finland
- Emil Aaltonen Foundation

PIHLAJALINNA

Growth of Pihlajalinna's business and revenue



Alueellista lääkärivuokrausta

- Perustettu vuonna 2001
- Ensimmäiset ulkoistussopimukset 2004 ja 2005
- Ensimmäinen yksityinen lääkäriasema Pirkanmaalle vuonna 2005
- Valtaosa liiketoiminnasta liittyi lääkärivuokraukseen

Kasvava ulkoistusliiketoiminta ja palvelutarjonnan laajentaminen

- Lääkäriasemaverkostoa rakennettiin ja laajennettiin
- Työterveyshuolto- ja hoivapalveluliiketoiminta käynnistettiin
- Suomen siihen mennessä suurin terveydenhuollon ulkoistus Jokilaakson sairaalassa 2010

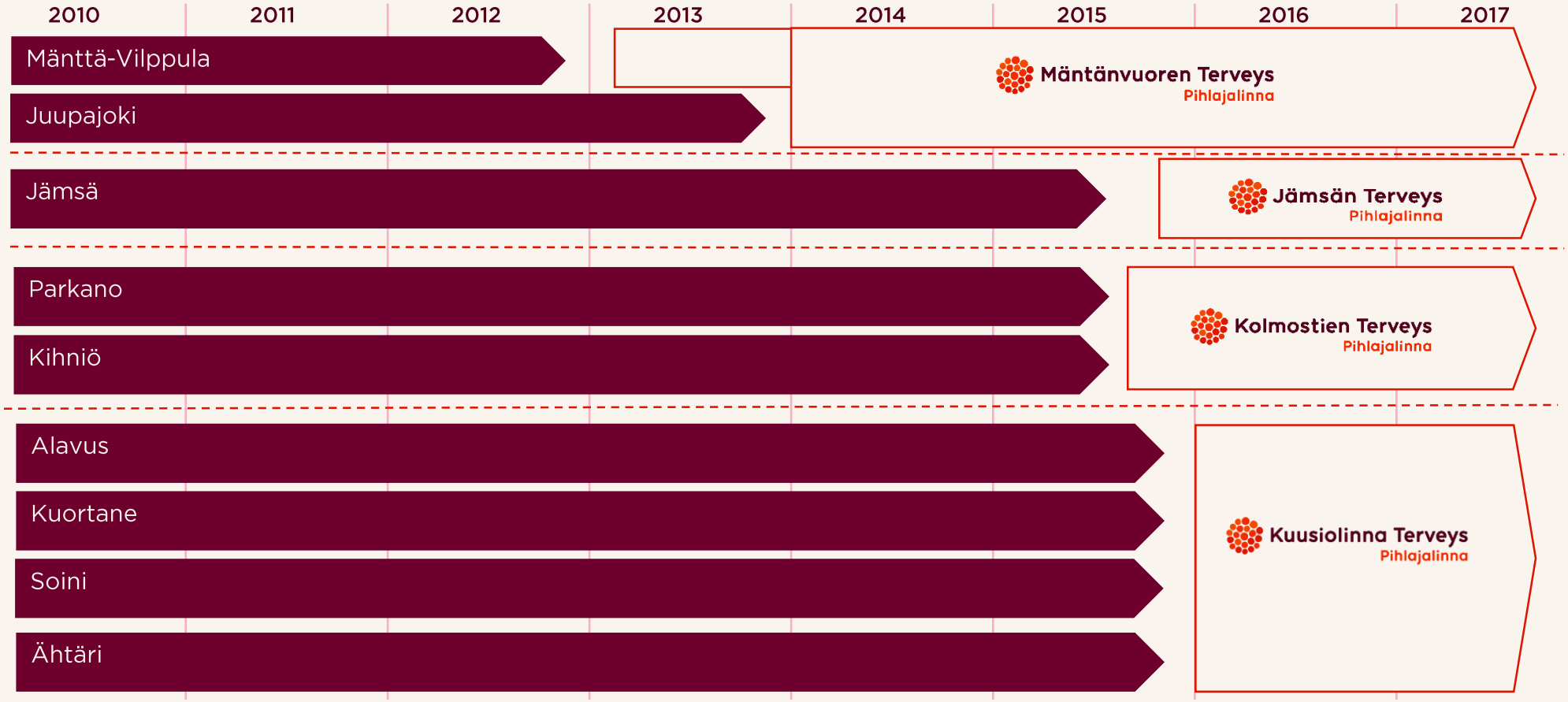
Kattava palvelutarjonta julkiselle ja yksityiselle sektorille

- Voimakas kasvu uusien sosiaali- ja terveydenhuollon kokonaisulkoistusten kautta
- Mm. Dextran, Koskiklinikan, Itä-Suomen Lääkäri-keskuksen ja Itä-Suomen Lääkäritalon hankinta
- Kuusiokuntien kokonaisulkoistuksen alku 1.1.2016
- Valtakunnallinen laajeneminen 2017–2020

Outsourcing example

In Mänttä-Vilppula, savings in social and healthcare service costs were used to build the Pihlajalinna arena

Through 4 joint ventures, Pihlajalinna provides social and healthcare services in 8 municipalities for more than 60,000 residents

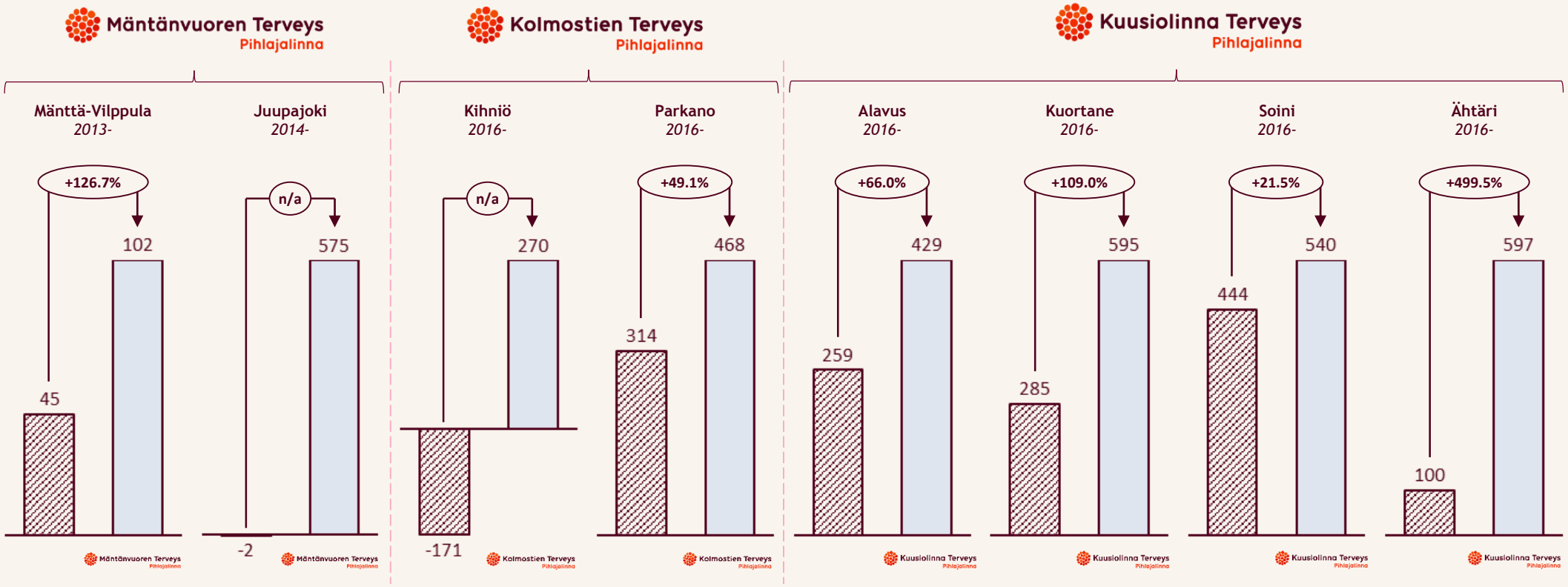


Sources: The municipalities' websites, Pihlajalinna's website, THL Sotkanet

The annual margins of Pihlajalinna's partner municipalities have developed very favourably during the cooperation

Development of annual margins in Pihlajalinna's partner municipalities following cooperation

Average per-capita annual margin for the 2 years before cooperation with Pihlajalinna and for the 2 years after the cooperation began, € per resident



1) The annual margin indicates the cash generated from operations that remains available for investments and loan repayments after operating costs are paid

Sources: Sotkanet, Statistics Finland, VALOR analysis

Mission

We help Finns to live a better life

Our values

Ethics

Energy

Open-mindedness

Vision

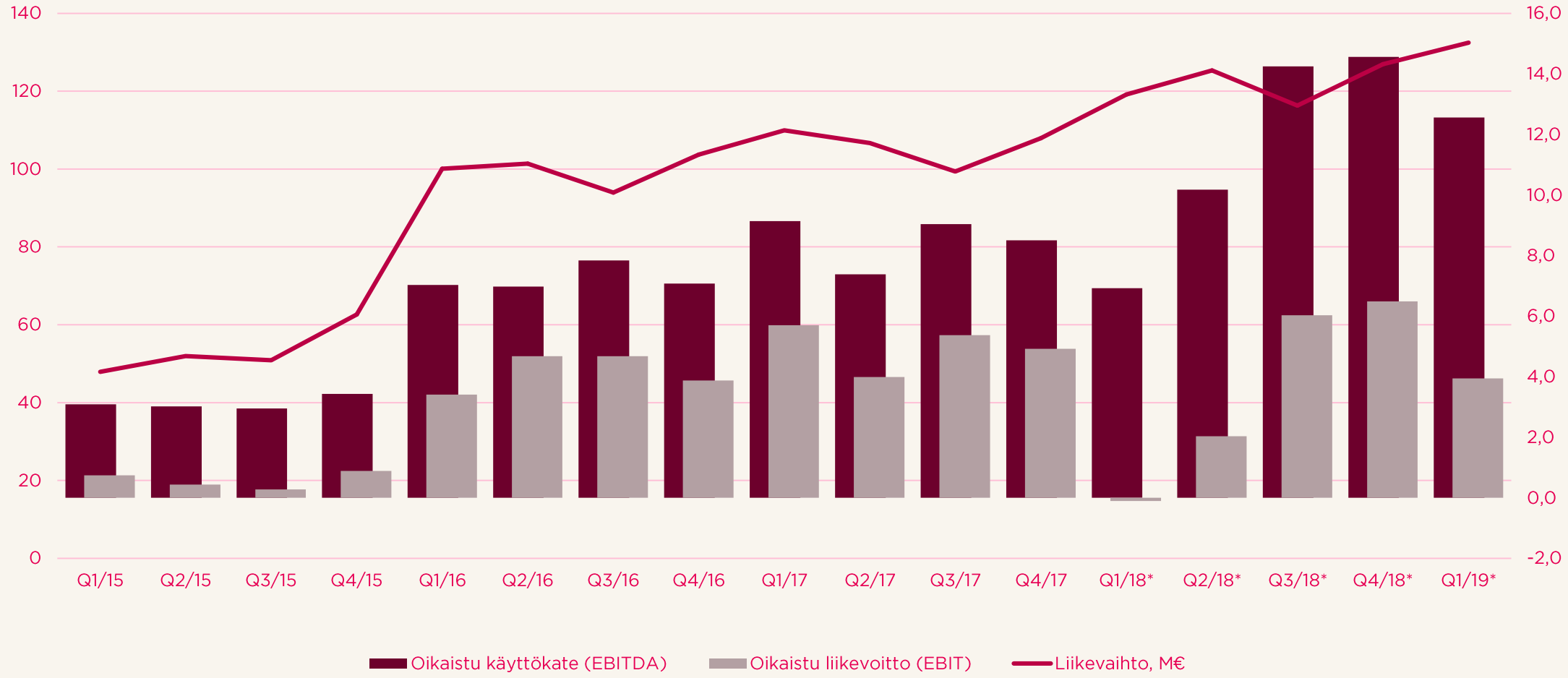
The most valued company in the healthcare and social services sector in Finland

Pihlajalinna

Pihlajalinna's outlook and future opportunities

Joni Aaltonen
CEO

Where we started from in Q4/2017



Pihlajalinna adopted the new IFRS 16 Leases standard fully retrospectively on 1 January 2019. Restated comparable financial figures were published on 18 April 2019 for each reporting period in 2018.

Focus areas since the end of 2017

- Organisational structure
- Social and healthcare services
- Profitability
- Geographical expansion
- Partner changes

Strategy 2018–2019:
Growth in all customer areas – profitability through growth

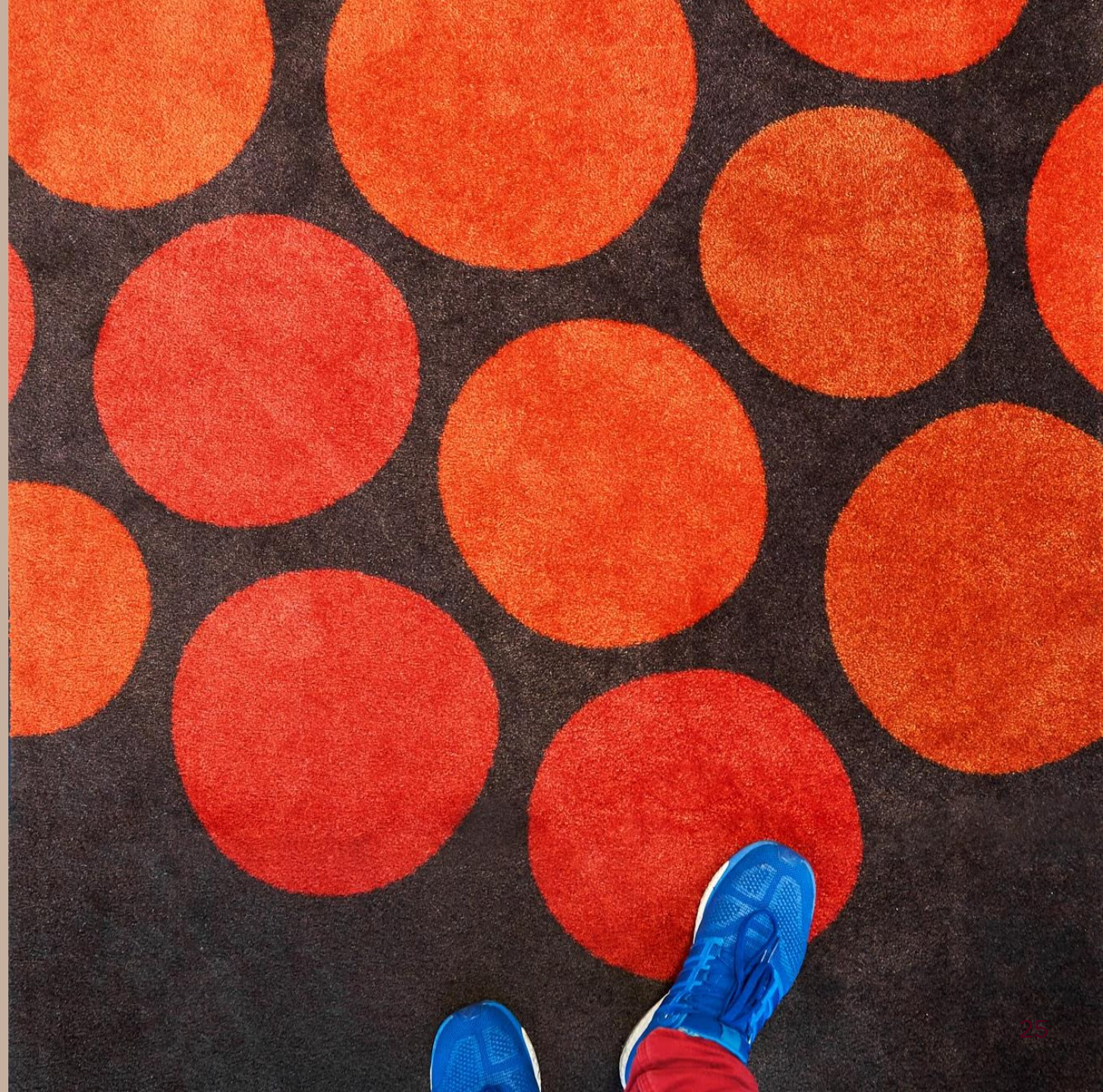
- Expanding the service network to regional capitals through acquisitions and quick integration processes
- Location-specific profitability
- Effective cross-selling of services
- Organic growth through a focus on sales and marketing
- Expanding the municipal service offering and creating an established service offering
- Improving customer satisfaction by developing the customer experience
- Organisational renewal
- Developing the job satisfaction of personnel and practitioners

Largest acquisitions 2018–2019

- **Linnan Klinikka:** private clinic and hospital in Hämeenlinna and two private clinics in the same region
- **Kymijoen Työterveys:** occupational healthcare provider, four operating locations in Kymenlaakso
- **Forever fitness centre chain:** 10 fitness centres in southern Finland (70% majority share)
- **Suomen Yksityiset Hammaslääkärit:** 7 dental clinics
  (51% majority share)
- **Doctagon:** high-growth health services company, strong in digital services and bilingual regions
- **Verso**

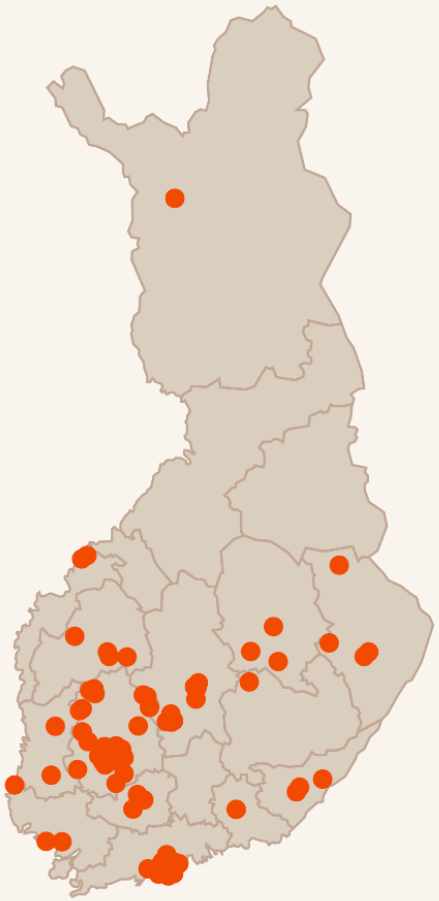
New organic growth initiatives

- Oulu, Seinäjoki, Turku – new full-service private clinics 2018
- Fennia – extensive cooperation agreement 2018
- Pirkanmaa Hospital District – letter of intent 04/19
- Heart Hospital – letter of intent 04/19
- Private clinic in Vaasa 06/19

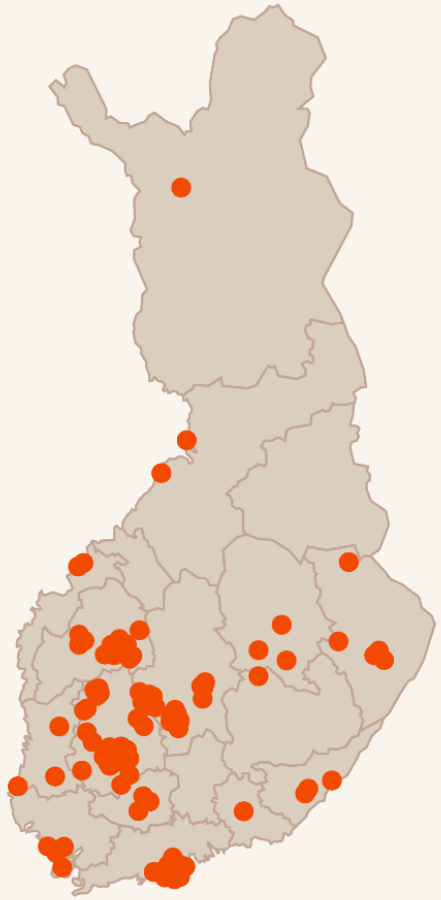


Growing into a national operator

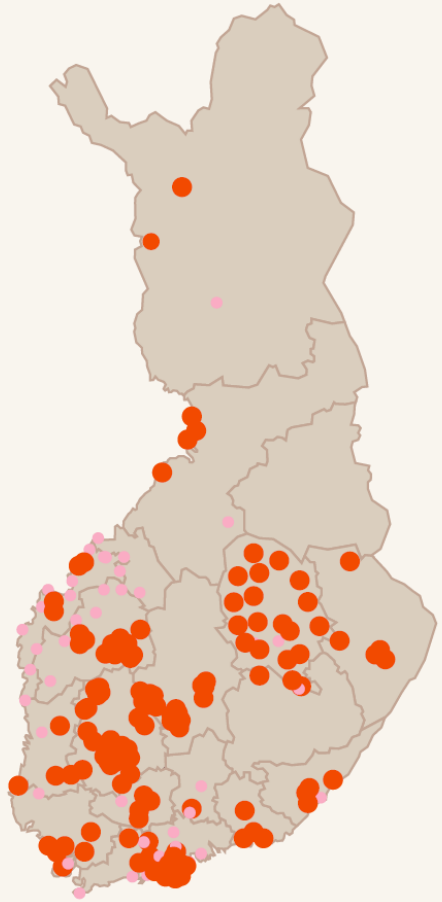
01.2017



01.2018



01.2019

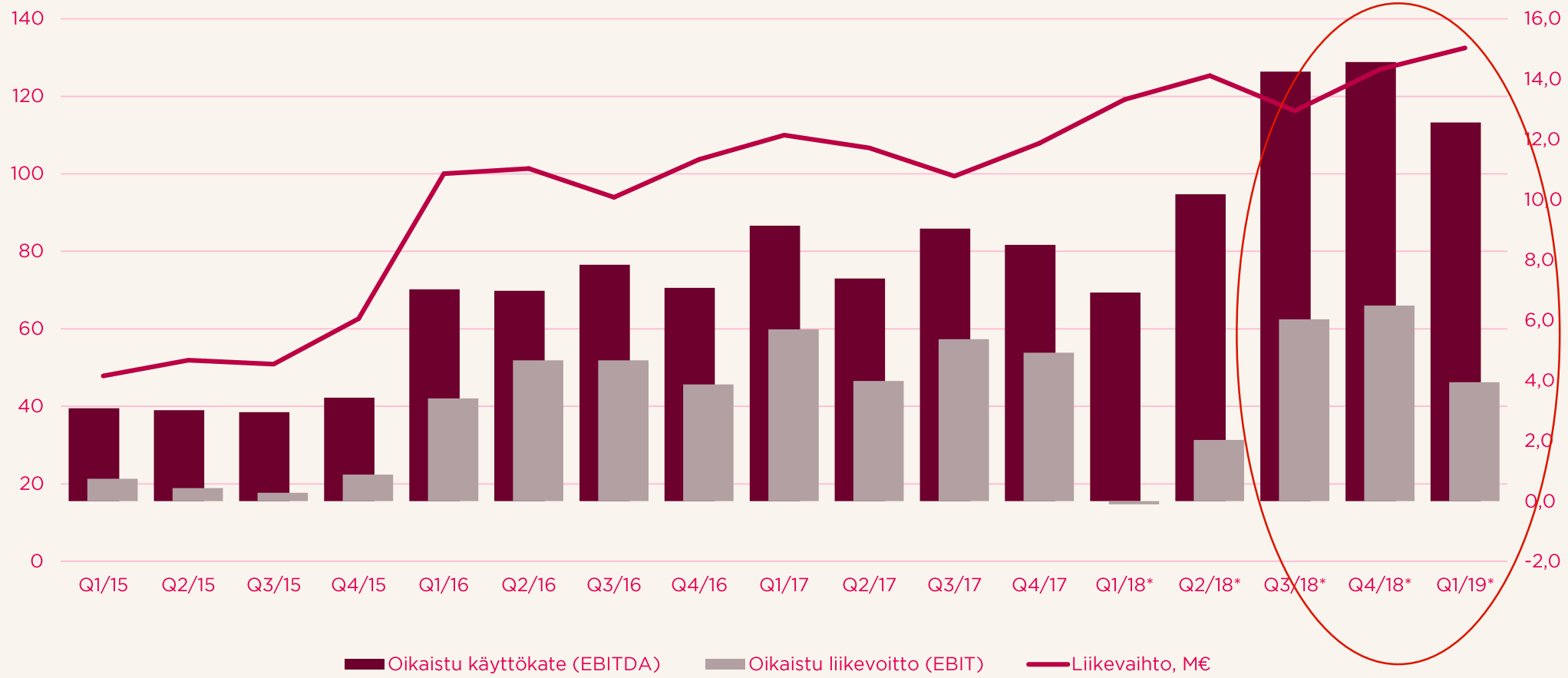


New locations:

Espoo
Hamina
Hämeenlinna
Iisalmi
Järvenpää
Lahti
Karhula
Kerava
Kolari
Kotka
Kouvola
Raisio
Vaasa
Varkaus

Lammi
Tuulos
Paimio
Joroinen
Juankoski
Kaavi
Keitele
Kiuruvesi

Profit performance – the effect of improvement measures is starting to show



* Pihlajalinna adopted the new IFRS 16 Leases standard fully retrospectively on 1 January 2019. Restated comparable financial figures were published on 18 April 2019 for each reporting period in 2018.

Market review – Pihlajalinna's situation

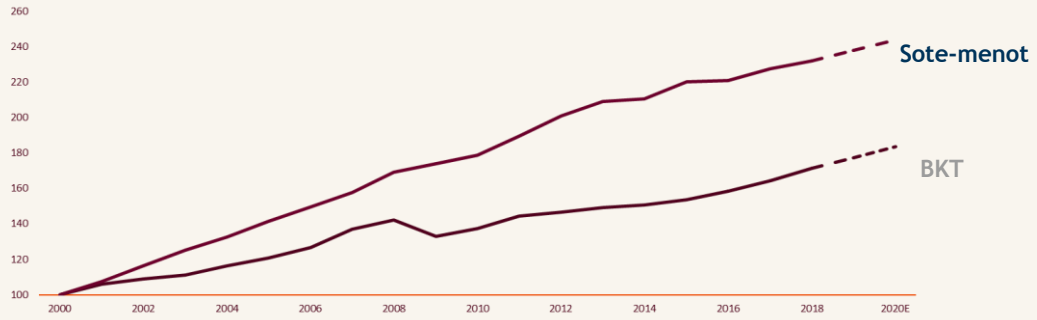
Pihlajalinna seeks to complement the public sector's service offering particularly in basic-level specialised care and non-urgent specialised care, as the public sector has implemented cuts in operations and centralised specialised care in fewer units.

The situation in the private market remains unchanged. The occupational healthcare market is expected to grow as many municipalities and other public sector entities are interested in divesting the occupational healthcare providers they currently own.

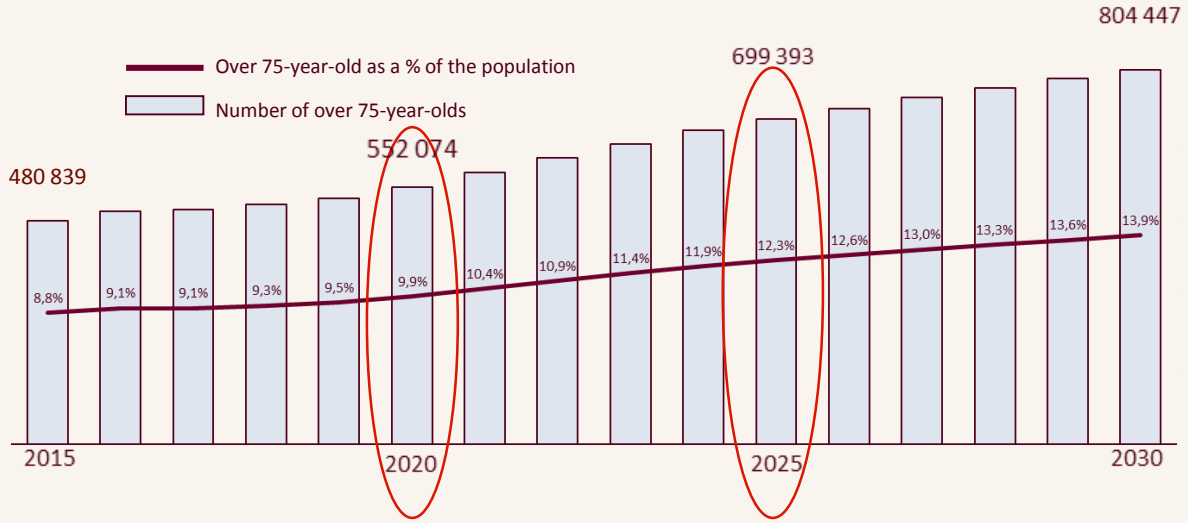
The increasing cost of social and healthcare services creates pressure on their public provision – the ageing of the population is a key driver

GDP and the cost of social and healthcare services 2000–2020E

Cost of social and healthcare services1) and GDP, index year 2000 = 100



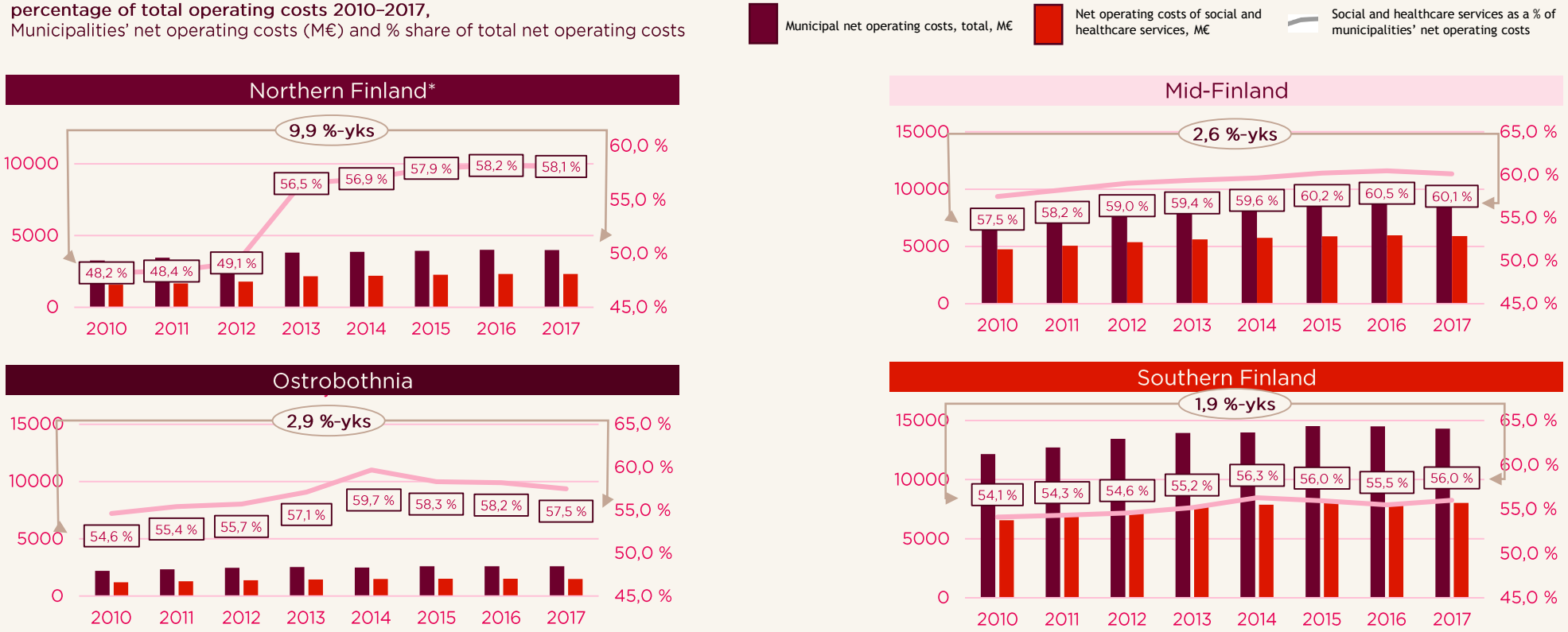
1) Includes social and healthcare service costs and associated costs. Does not include customer fees.
Sources: National Institute for Health and Welfare (THL), the Finnish Centre for Pensions, Statistics Finland, VALOR analysis



Sources: National Institute for Health and Welfare (THL), VALOR analysis

With municipalities' social and healthcare service costs representing ~60% of their operating costs, declining municipal finances force a careful review of social and healthcare service costs

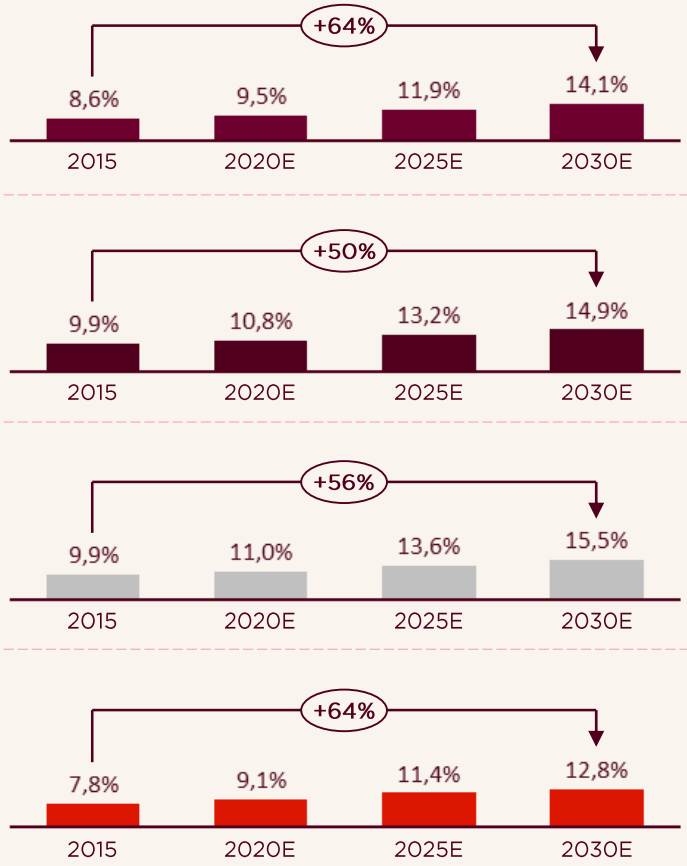
Municipalities' operating costs for social and healthcare services as a percentage of total operating costs 2010–2017,
Municipalities' net operating costs (M€) and % share of total net operating costs



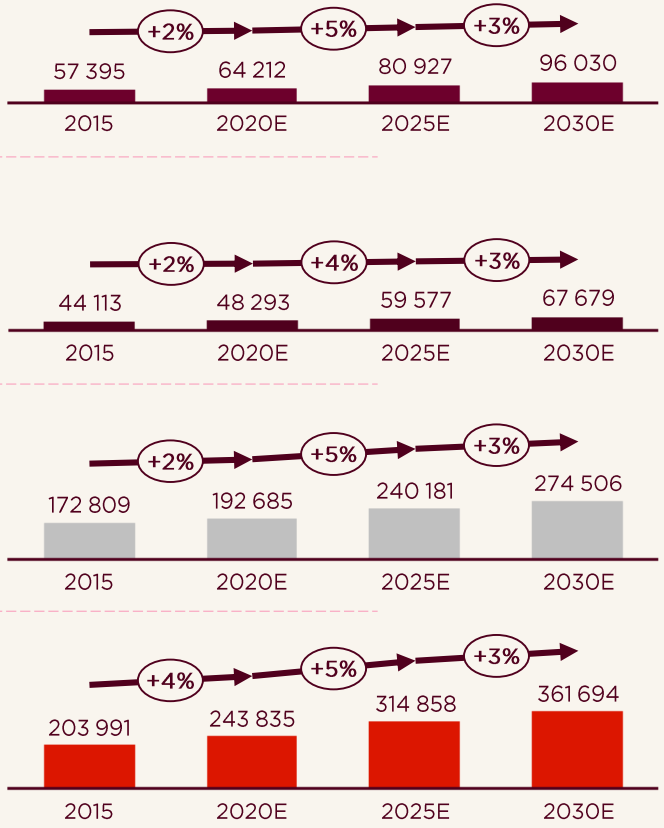
*In 2010–2012, the municipalities included in the Kainuu administrative experiment area (Hyrynsalmi, Kajaani, Kuhmo, Paltamo, Puolanka, Ristijärvi, Sotkamo, Suomussalmi and Vuolijoki) did not provide municipal financial and operating statistics for operations that were the responsibility of the Kainuu joint municipal authority. The figures for Northern Finland are not comparable for these years.Sources: Kuntatalous municipal statistics, Statistics Finland, VALOR analysis

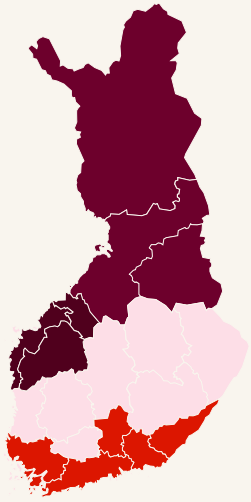
As the population ages, the share of over 75-year-olds of the population will exceed 50% in each business area

Over 75-year-olds' share of the population 2015–2030E
% share and % change



Increase in the number of over 75-year-olds 2020E–2030E
Number of over 75-year-olds and the average annual rate of increase

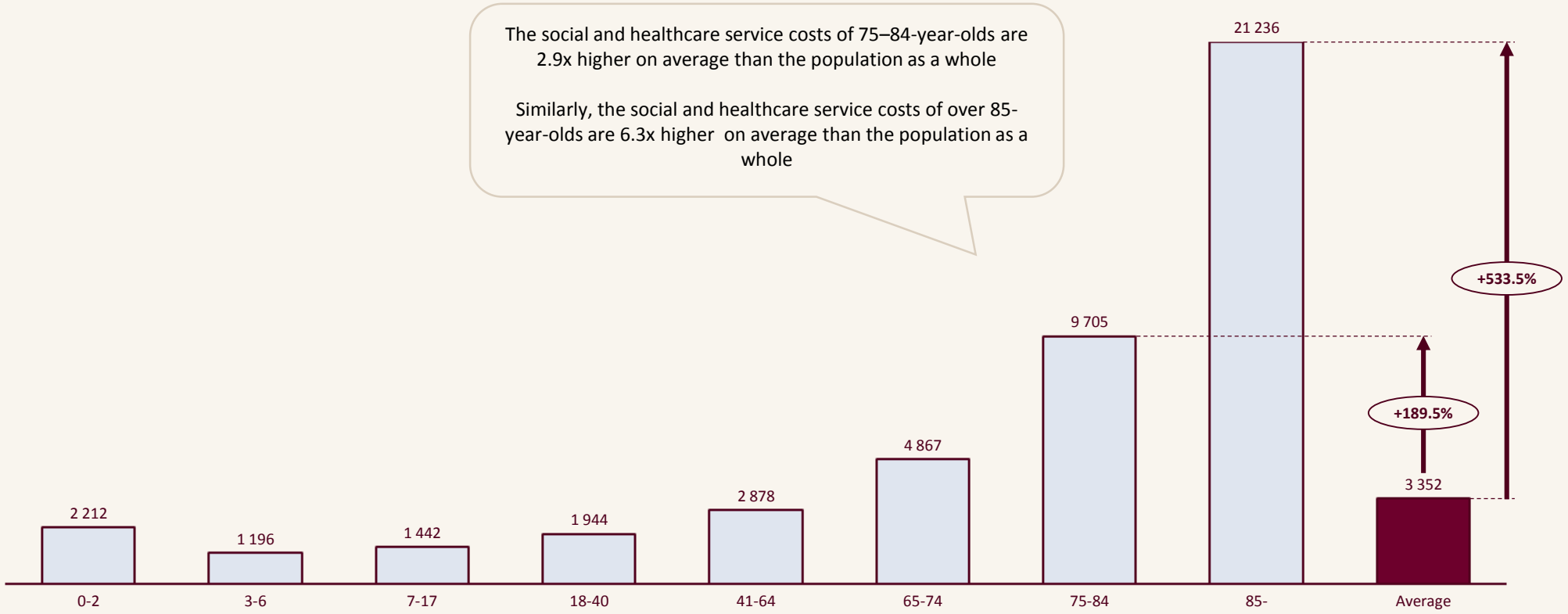




Sources: Statistics Finland, VALOR analysis

The ageing of the large generations will pose a challenge to municipal finances in the form of a substantial increase in social and healthcare service costs

Distribution of social and healthcare service costs by age group, nationally, per capita (2011)
€ per capita and % difference compared to the population average



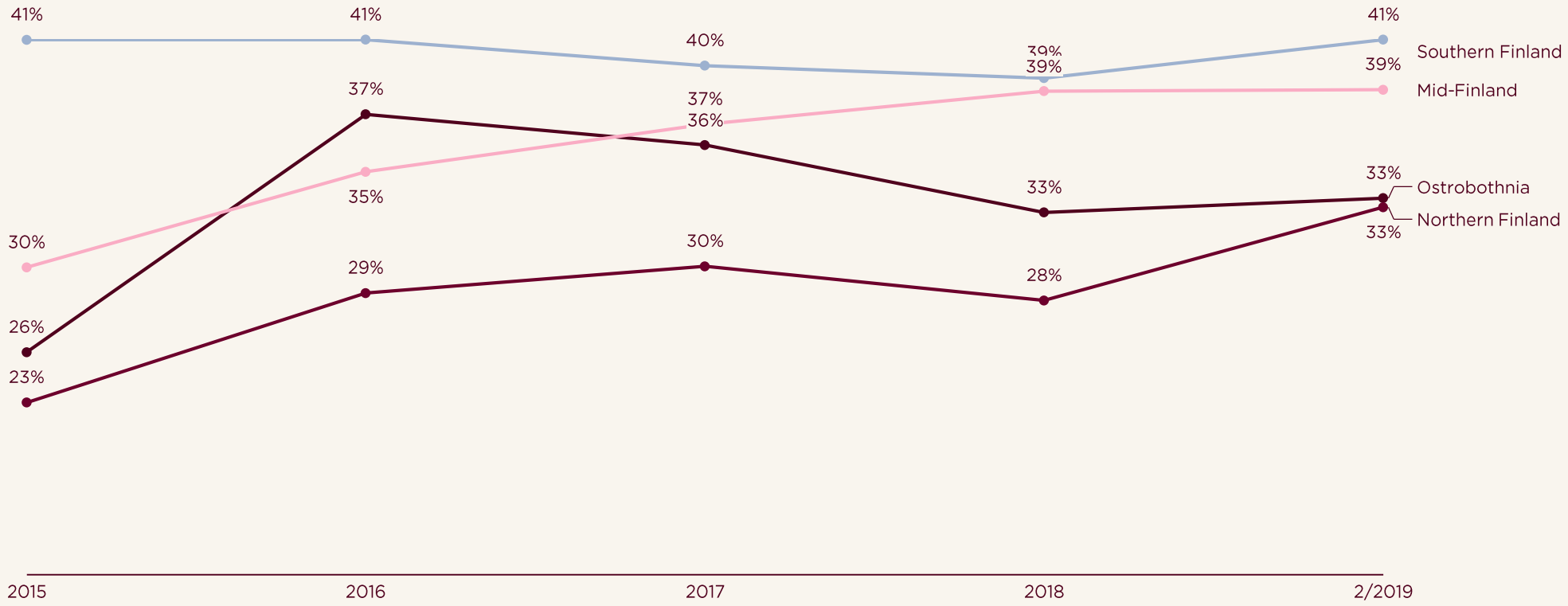
Source: National Institute for Health and Welfare (THL) – Women's and men's healthcare costs by age group 2011, VALOR analysis

Nationally, the waiting time has exceeded one week for 39% of primary care procedures

Access to primary care by business area 2015–2/2019

Proportion of primary care visits with a waiting time exceeding 7 days from contact, (% of actual visits)

There are significant regional differences in access to care



Data for 2015–2016 is not available for South Karelia and Kymenlaakso

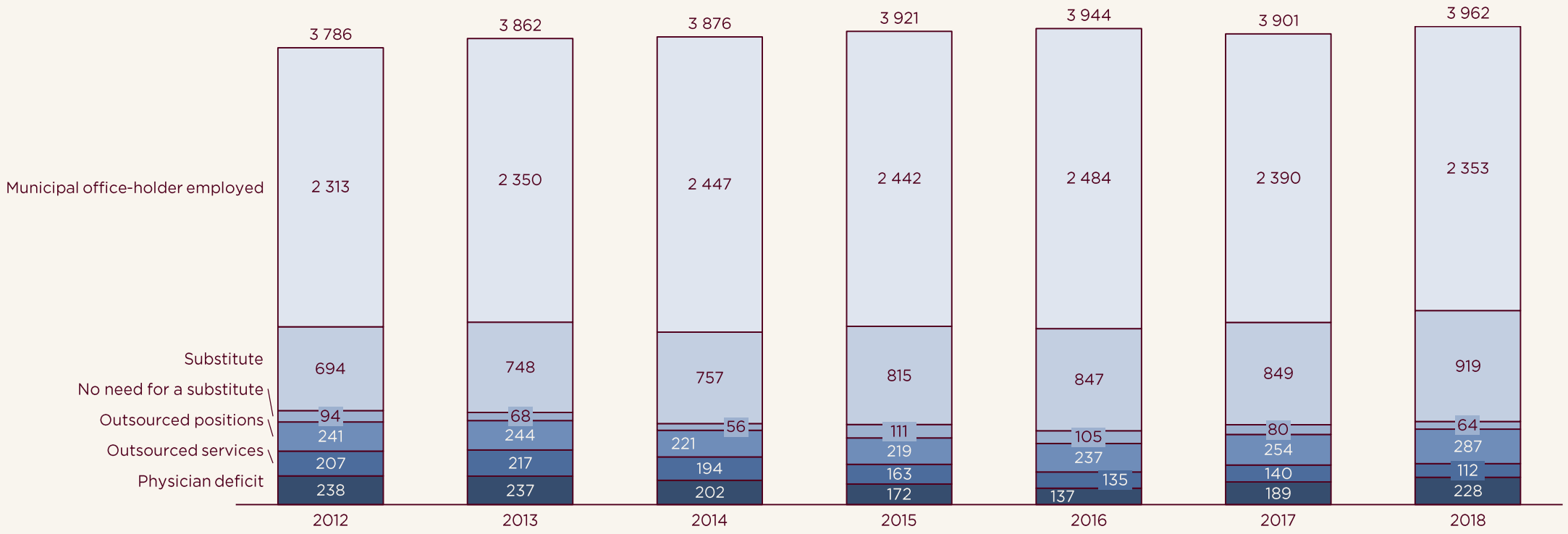
Source: National Institute for Health and Welfare (THL), VALOR analysis

Pihlajalinna

33

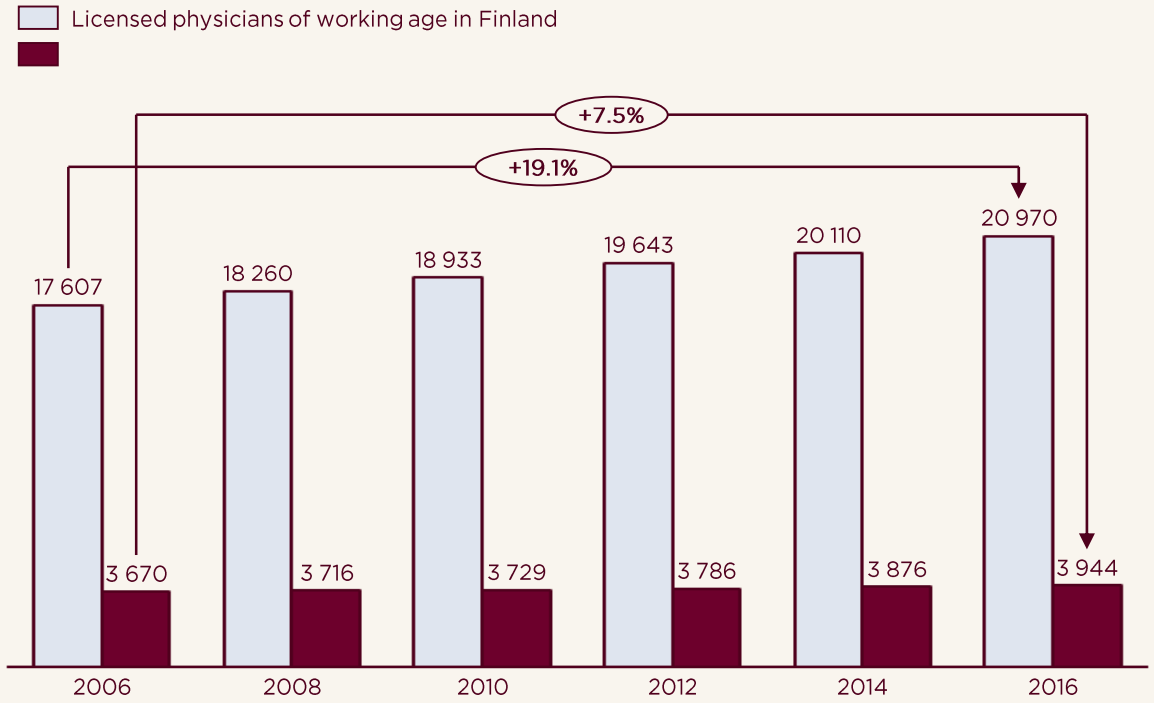
Health centres nationally face challenges in trying to increase the proportion of municipal officeholders among those working as physicians

Breakdown of duties and public office positions among physicians at health centres 2012–2018
Number of physicians by type of position

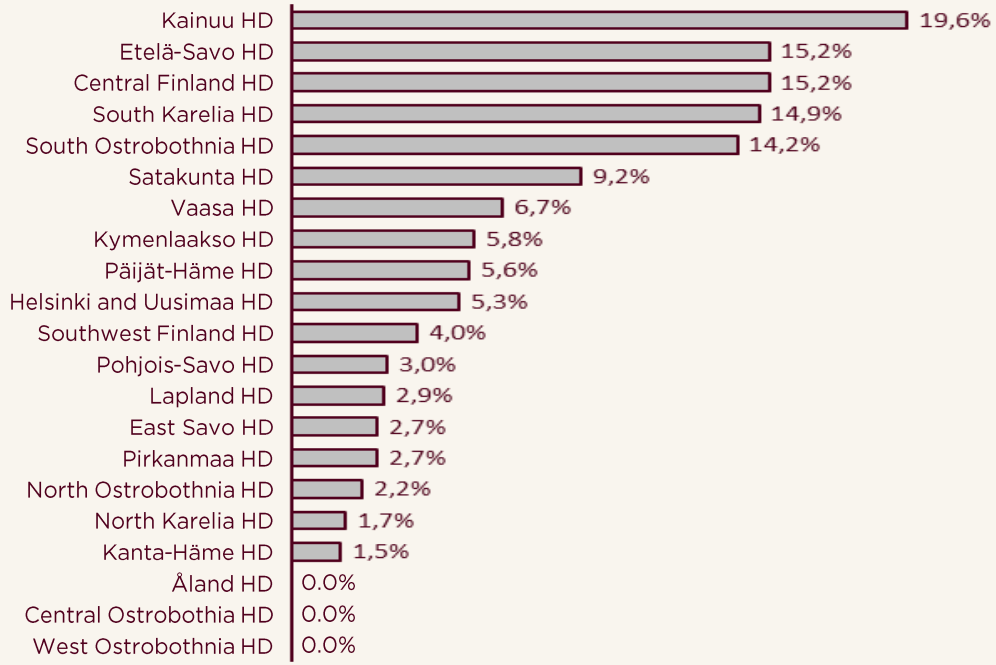


The number of licensed physicians has increased faster than the number of positions for physicians at health centres – the deficit in physicians varies geographically

Number of licensed physicians and health centre physician positions 2006–2016
Number of physicians and % change



Physician deficit in health centres by hospital district 2018
Proportion of vacant positions for physicians (physician deficit) of all physician positions at health centres, %

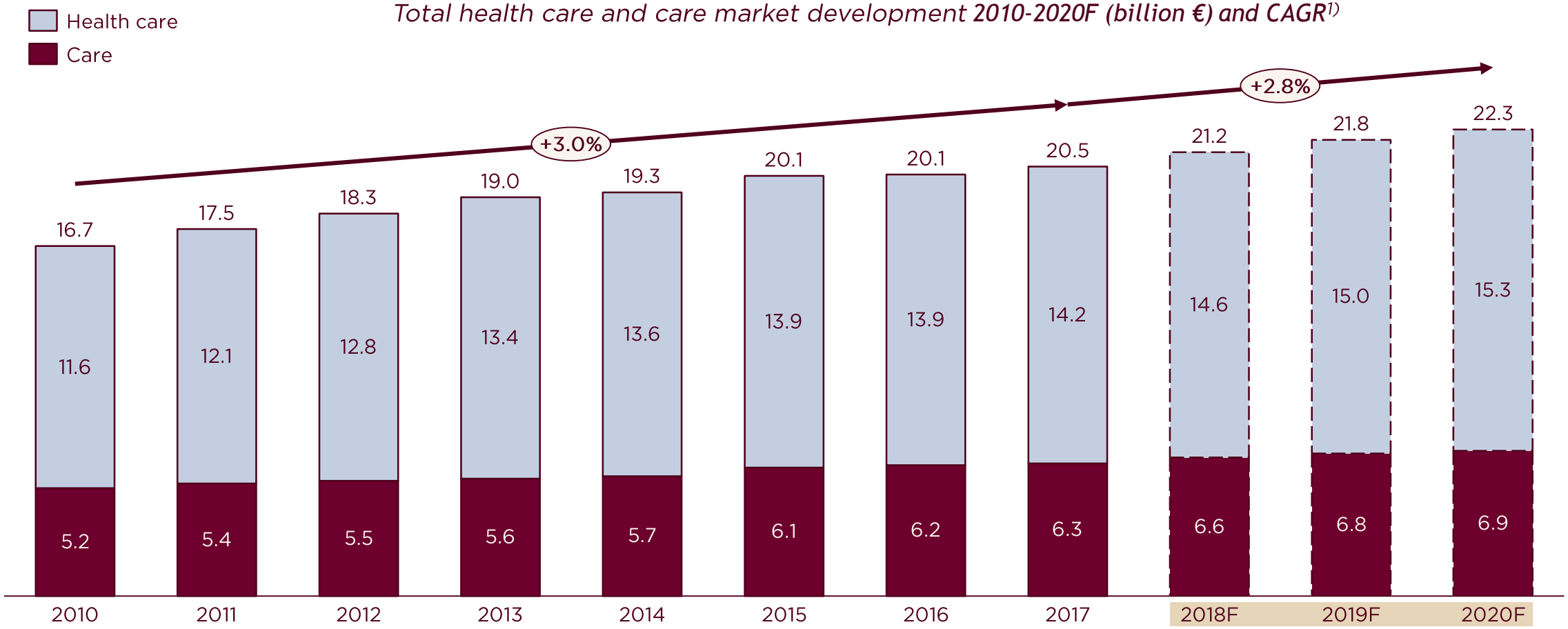


Sources: The Finnish Medical Association – Physicians in Finland 2016 study, statistics on physicians at health centres 2012, 2014 and 2018, Sotkanet, VALOR analysis

The overall market for health care and care services has grown by an average of 3.0% annually in 2010-2017 – aging population is key growth driver looking forward

The overall market growth has been mainly driven by secondary health care and elderly care segments

Total health care and care market development 2010-2020F (billion €) and CAGR[1)]

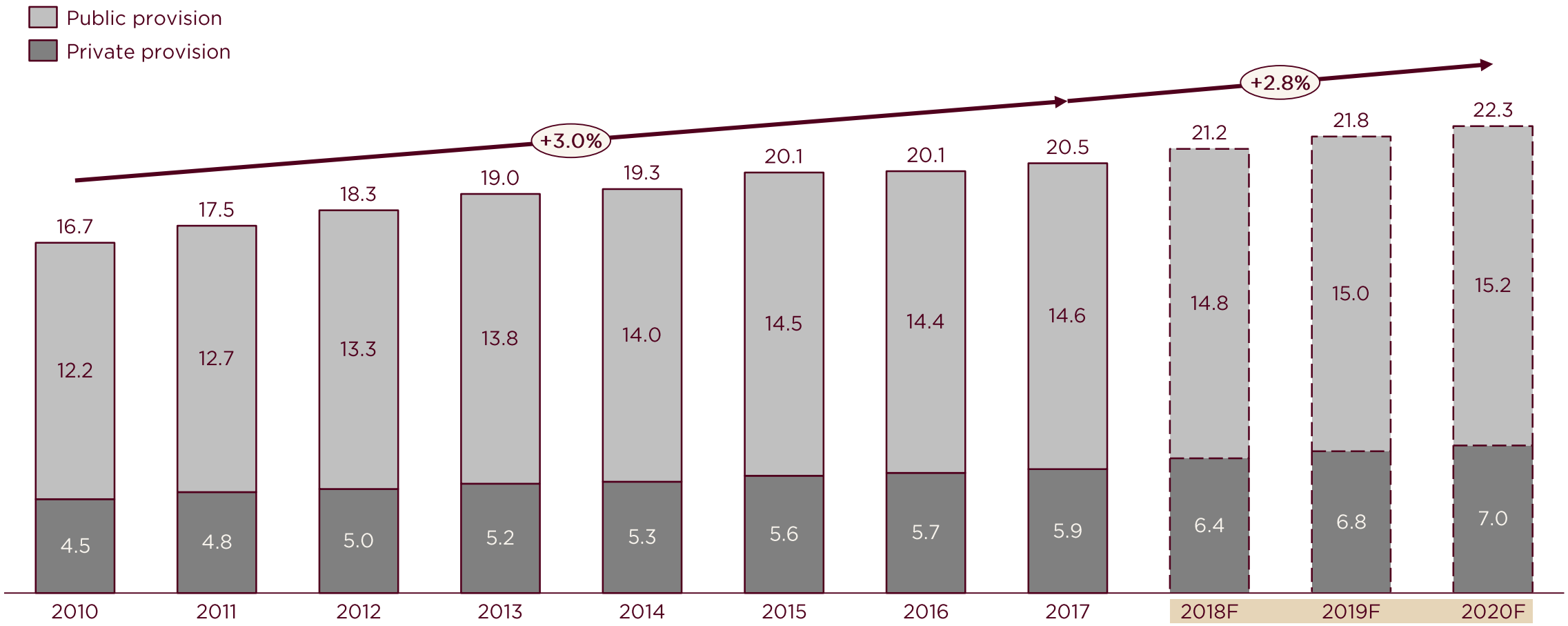


1) The publicly-funded market is based on segment-specific operating costs for social and health services, plus customer charges
2) Irrelevant cost items for private providers have been cleared from the total health care and care market e.g. transportation, drugs and depend care
Sources: National Institute For Health and Welfare, Statistics Finland, VALOR-analysis

Private provisioning has grown by an average of 4.1% annually in 2010-2017, while public service provisioning has grown by 2.5%

Private provisioning growth has been mainly driven by specialized health care, occupational health care, elderly and disabled care

Health care and care development by provisioning 2010-2020F (Mrd. €) and CAGR[1,2)]



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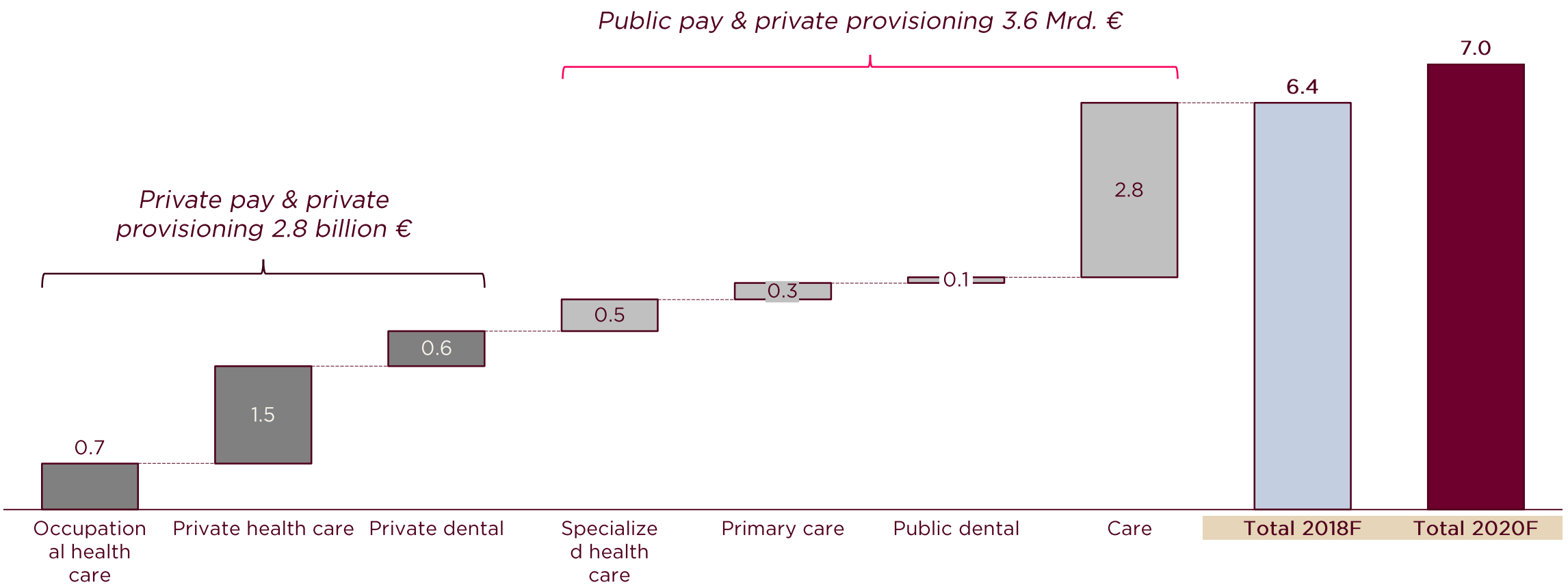
Sources: National Institute For Health and Welfare, Statistics Finland, VALOR-analysis

The relevant total market for Pihlajalinna is €6.4 billion, the average annual growth rate has been 4.1% in 2010-2017 – the market potential will grow as the role of private producers increases in the publicly pay market

- Pihlajalinna's relevant market consists of €2.8 billion private pay and €3.6 billion public pay

Relevant market for Pihlajalinna by segment and payer 2018F (billion €)[1,2,3)]

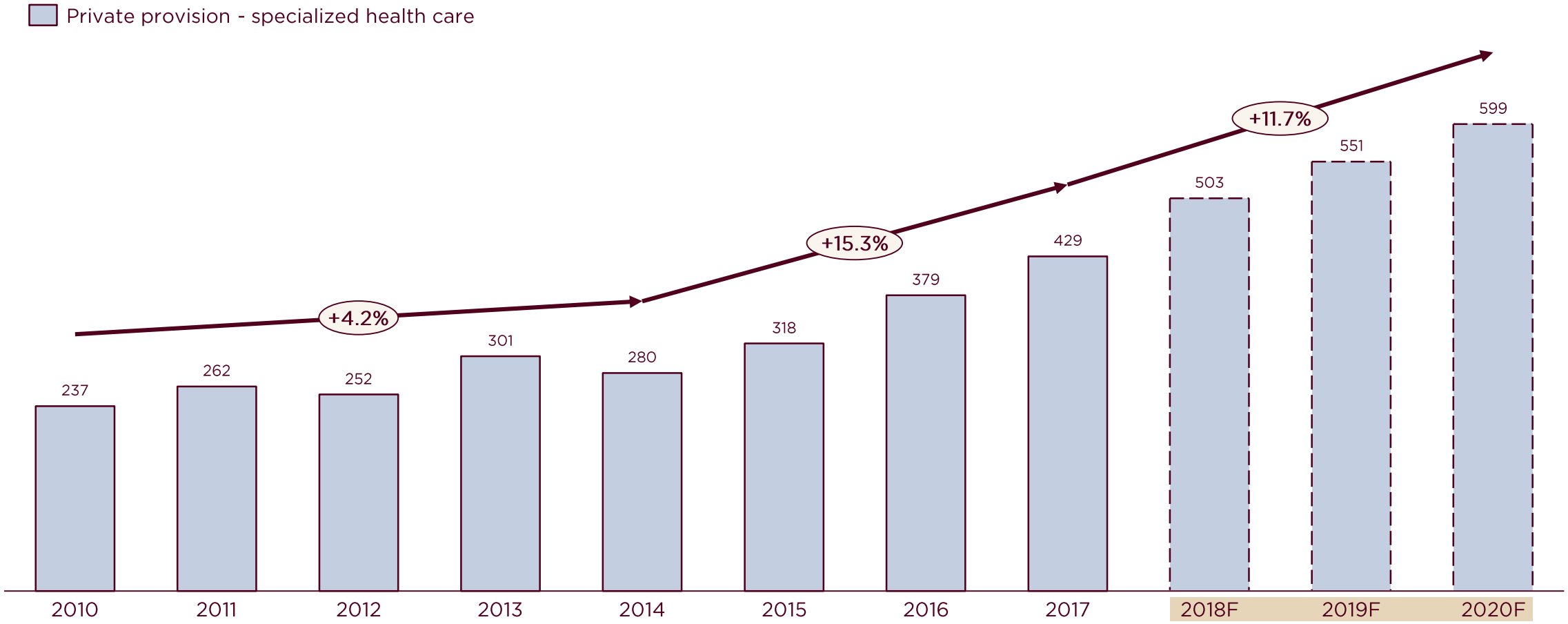


1) The publicly-funded market is based on segment-specific operating costs for social and health services, plus customer charges
2) Irrelevant cost items for private providers have been cleared from the total health care and care market e.g. transportation, drugs and depend care
3) The relevant market for Pihlajalinna is defined as total private provided market, including both private and public pay segments
Sources: National Institute For Health and Welfare, Statistics Finland, VALOR-analysis

The role of private providers has grown significantly in specialized health care – access to services and cost challenges in the public sector will continue to support growth

Private provisioning grew on average 15.3% annually from 2014 to 2017

Private provisioning in specialized health care 2010-2020F (M€) & CAGR (%)[1)]



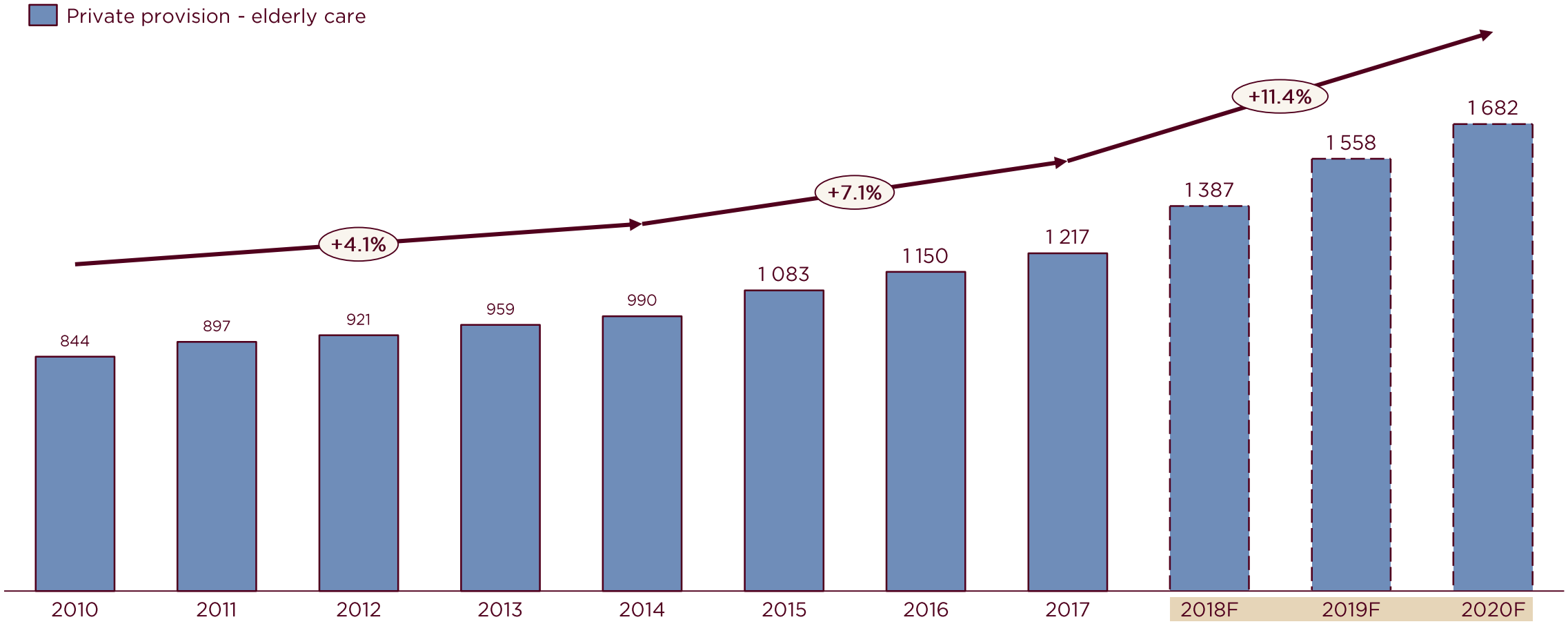
1) The publicly-funded market is based on segment-specific operating costs for social and health services, plus customer charges

Sources: National Institute For Health and Welfare, Statistics Finland, VALOR-analysis

Termination of institutional care and aging population drive growth for private players in the elderly care

Baby boomers will drive the increase in the number of 75+ year olds starting from ~2020 – private providers role will increase

Private provisioning of the eldelry care 2010-2020F (M€) & CAGR (%)[1)]



1) The publicly-funded market is based on segment-specific operating costs for social and health services, plus customer charges

Sources: National Institute For Health and Welfare, Statistics Finland, VALOR-analysis

Outlook for 2019

Pihlajalinna's consolidated revenue is expected to increase from the 2018 level.

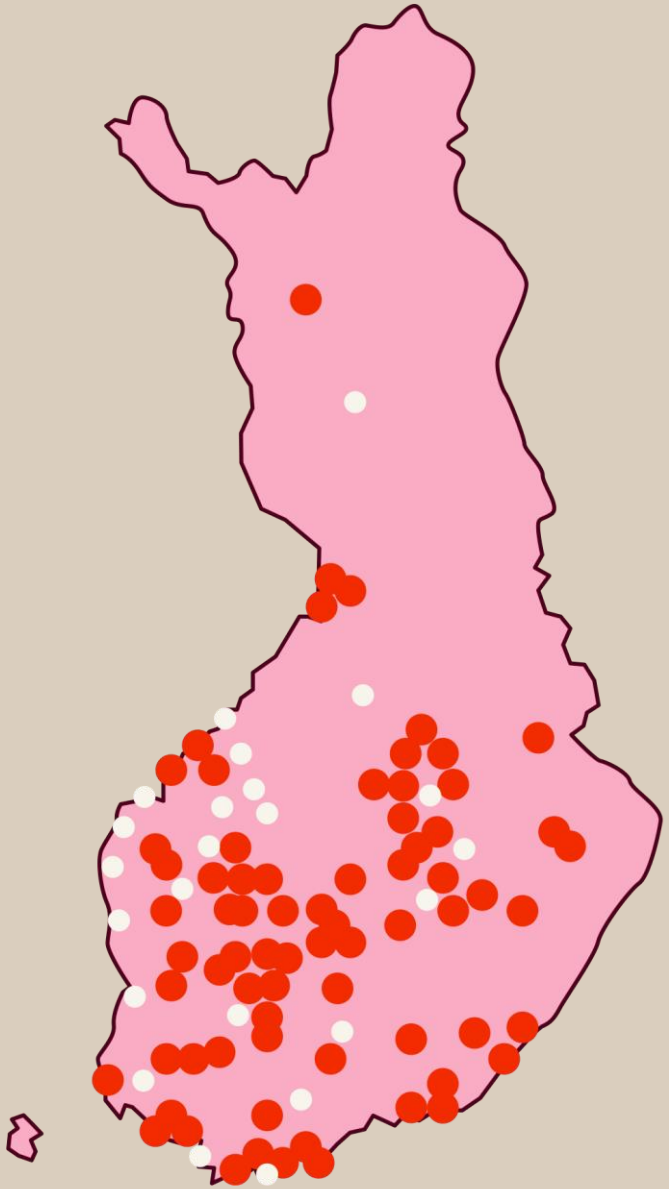
Adjusted EBIT is expected to improve clearly compared to 2018.

Pihlajalinna

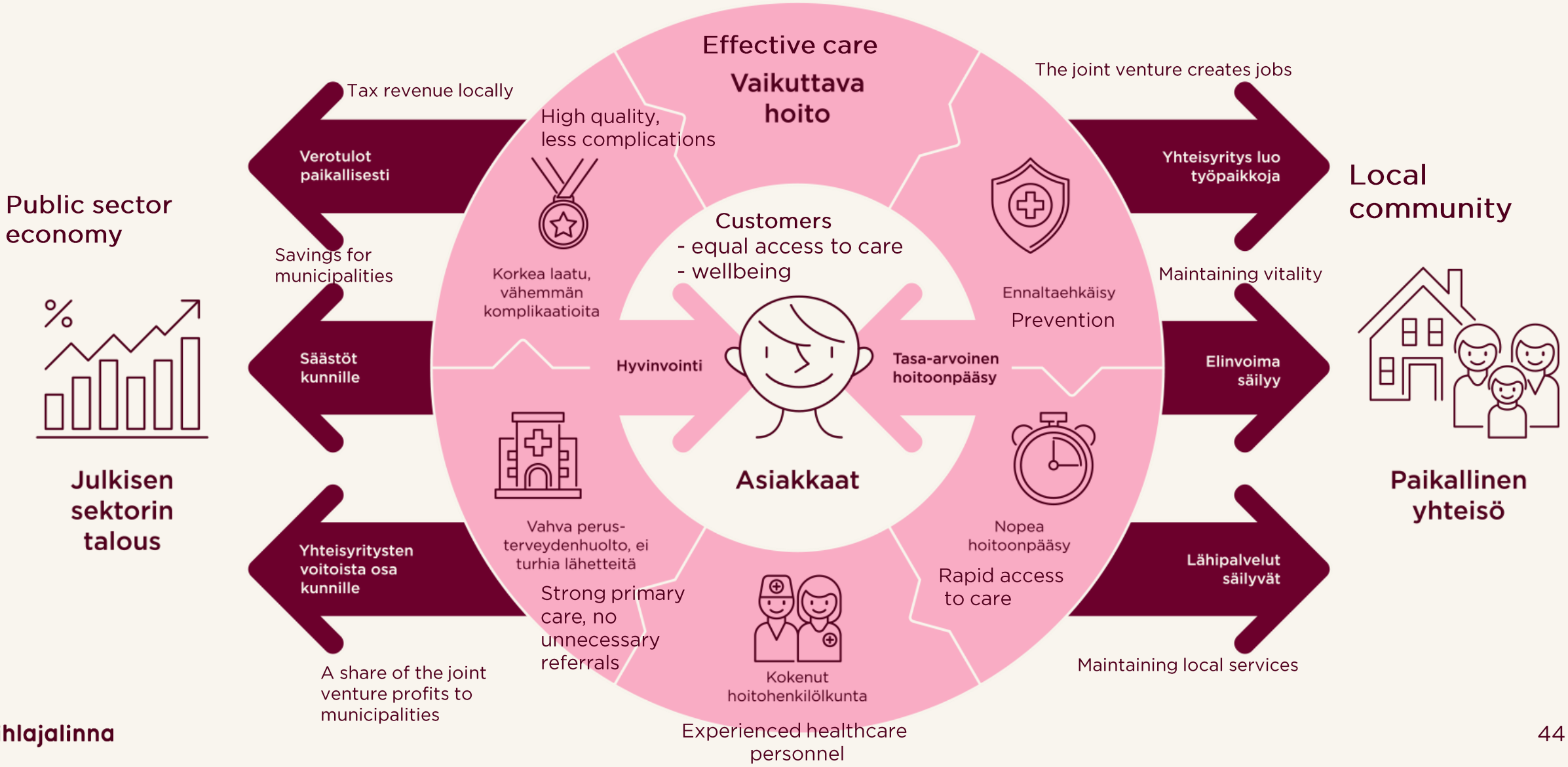
Consolidation of public and private sector services for the good of the customer

TEIJA KULMALA
HEAD OF BUSINESS OPERATIONS, MID-FINLAND

- The cornerstone of business is combining the best aspects of private and public social and healthcare services
- A key strength is coordinating the interfaces between social and healthcare services –> effective regional integrated social and healthcare services
- Pihlajalinna focuses on the comprehensive management of the service chain



The Pihlajalinna joint venture model with municipalities



Strong track record in fixed-price municipal operations

Development of treatment and referral chains in public healthcare since 2010

–> the goals are the timely provision of services of very high quality as well as the management of overall healthcare costs

In the reference municipalities (9), there is a clear link between the overall costs of specialised care and locally produced services

–> the higher the % share of specialised care costs that are part of the local service, the lower the total costs of specialised care

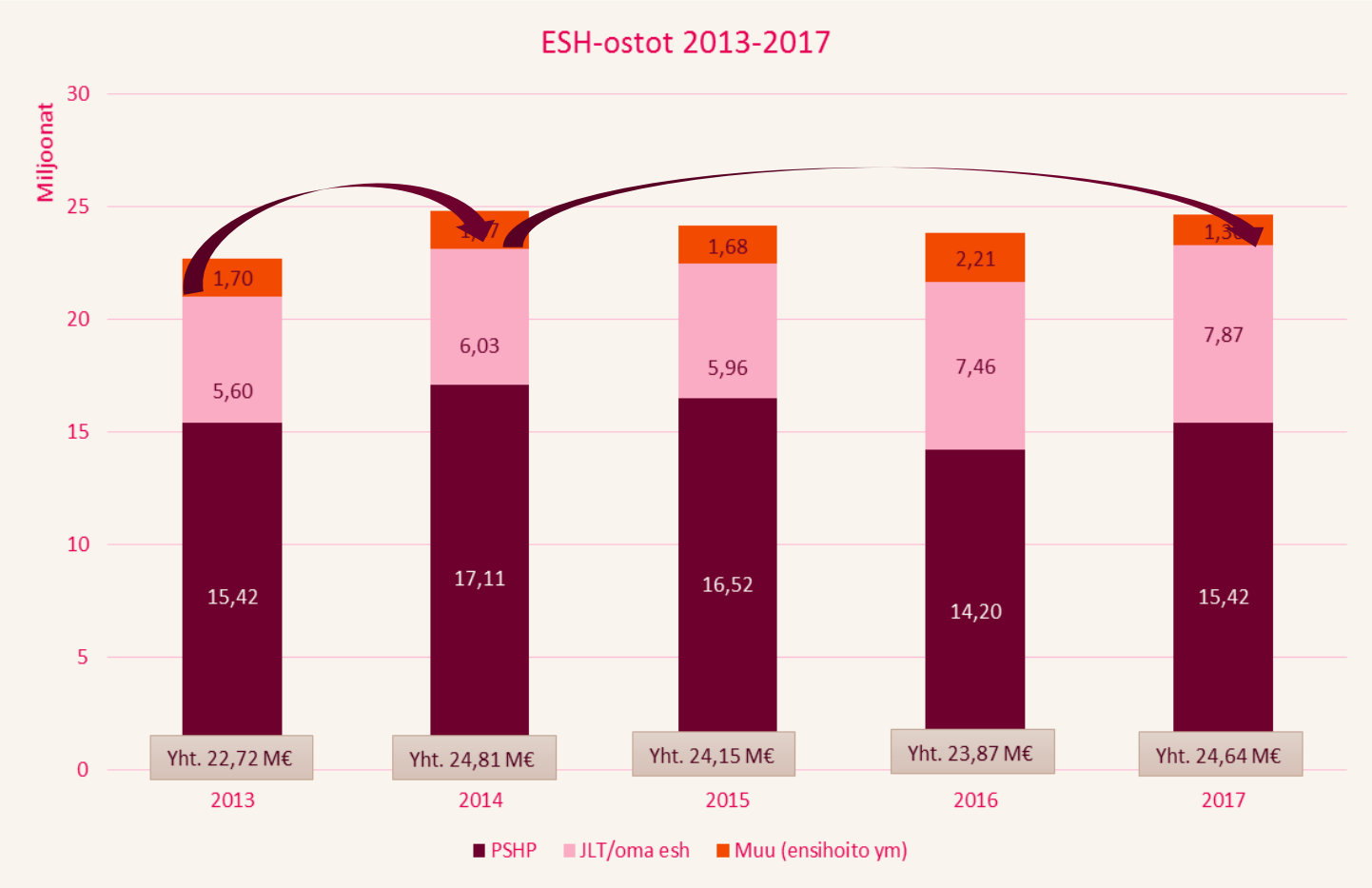
With nearly 10 years of experience and an operating model developed for this context, Pihlajalinna's expertise in the management of cost development in specialised care is unique in Finland

From a silo-based approach to managing the big picture

Reference: The cornerstones of managing the costs of specialised care, case Jämsä

9.2% increase

0.6% decrease



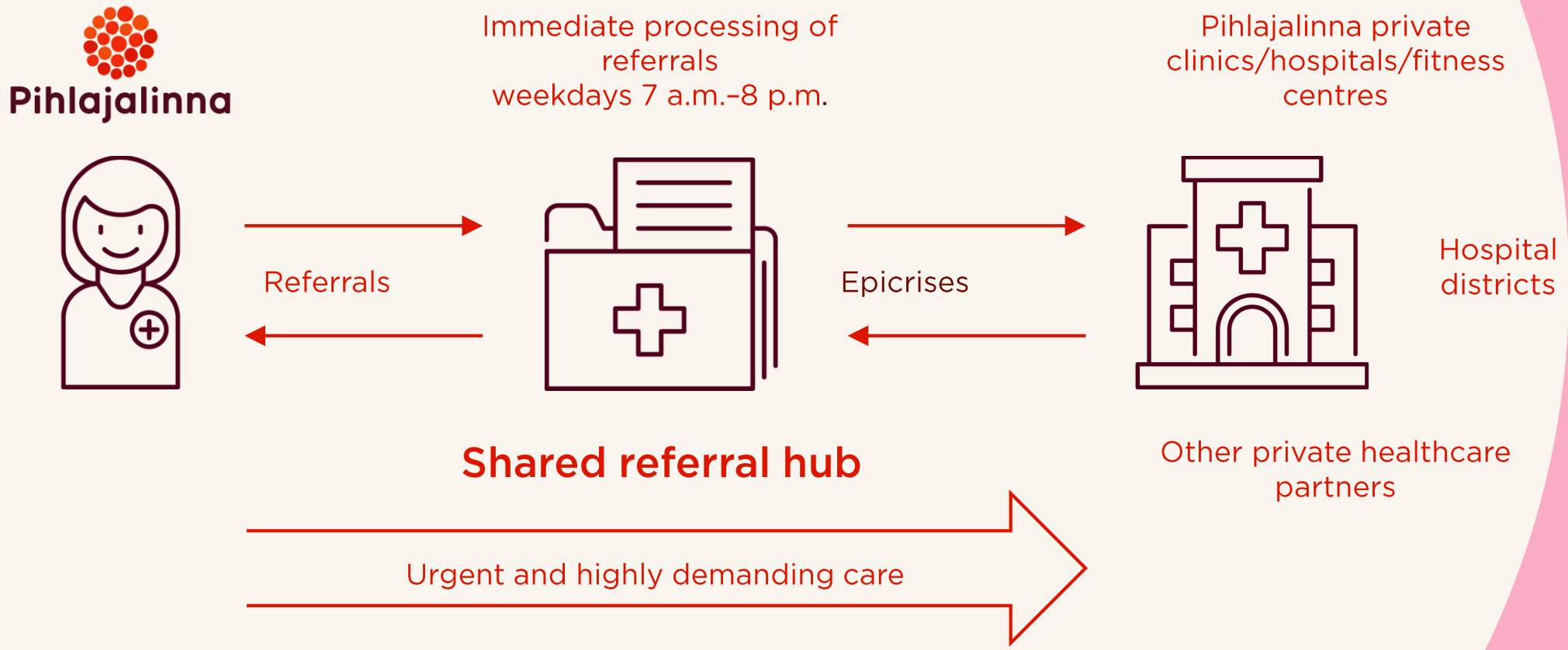
Cooperation between joint ventures, the hospital district and subcontractors

Coordinated care path

24/7 first aid, surgical services, ward units as local services

Pihlajalinna

Multiple producer model in specialised care, with Pihlajalinna responsible for the overall management of the referral chain



Pihlajalinna's operating model in specialised care

- Treatment practices based on evidence and care guidelines
- Quick and timely access to care and no waiting lines in specialised care services including surgeries; hospitals with no queues
- Wide range of specialist physicians and fairly demanding specialised care, including back surgery and joint replacement surgery

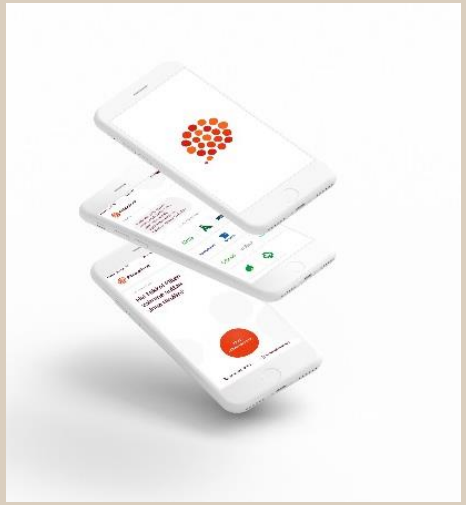
- Goal-driven rehabilitation, which enables quick discharging and return to work
- Early identification of customers who are heavy users of services and coordinating their care
- Prevention of illnesses requiring expensive specialised care
- Real-time monitoring of the big picture using Pihlajalinna's ERP system
- Multi-channel approach: Specialist support for units 24/7 by telephone, chat and video, also on mobile

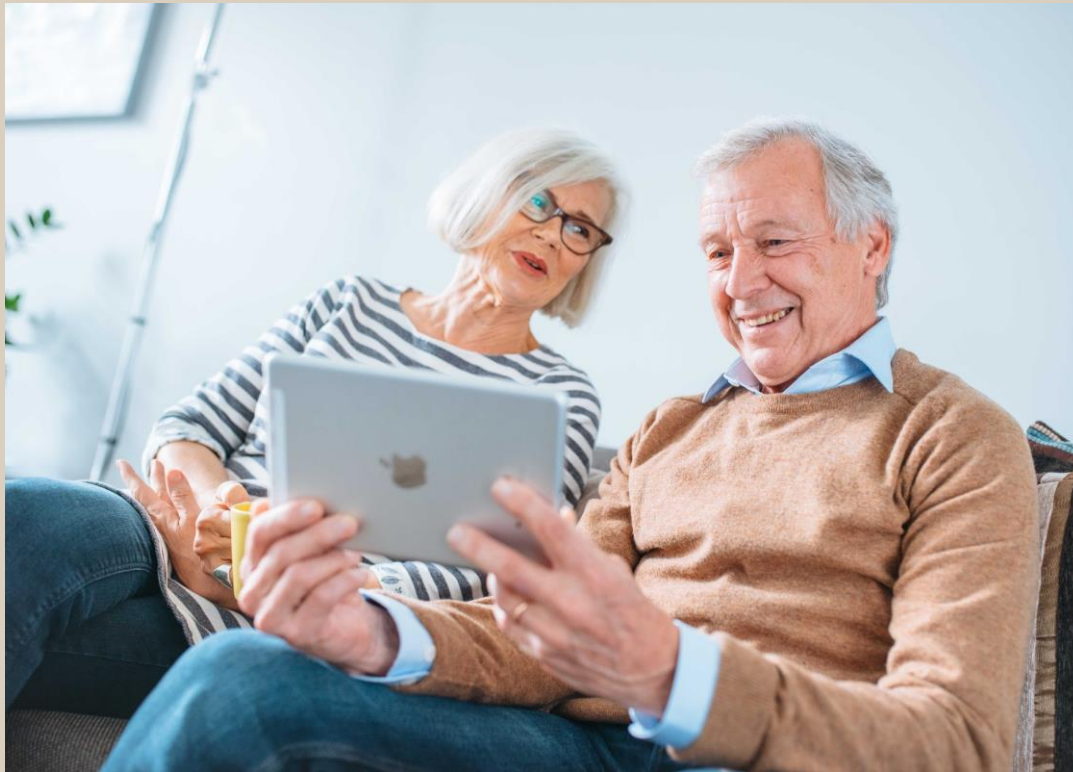
Multi-channel service use – the customer chooses how to use the services

We build our service and care paths in such a way as to allow customers to choose their service channel based on their personal preferences and the nature of their situation

Customers are identified via various service channels, which means that details such as partnership pricing can be applied.

Pihlajalinna's customer always knows "what will happen next", i.e. why, how and when their case will be dealt with.





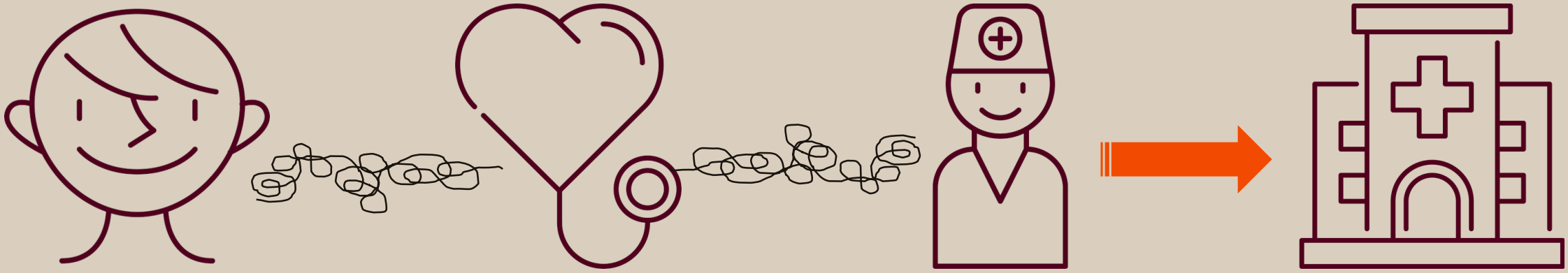
We are expanding our service models through partnerships– Pirkanmaa hospital disctric and Sydänsairaala (Heart Hospital)

Partnerships are used to eliminate boundaries as well as enhance digital development, care paths and the development of work communities

Close cooperation between public and private operators – the operating models can be duplicated nationally

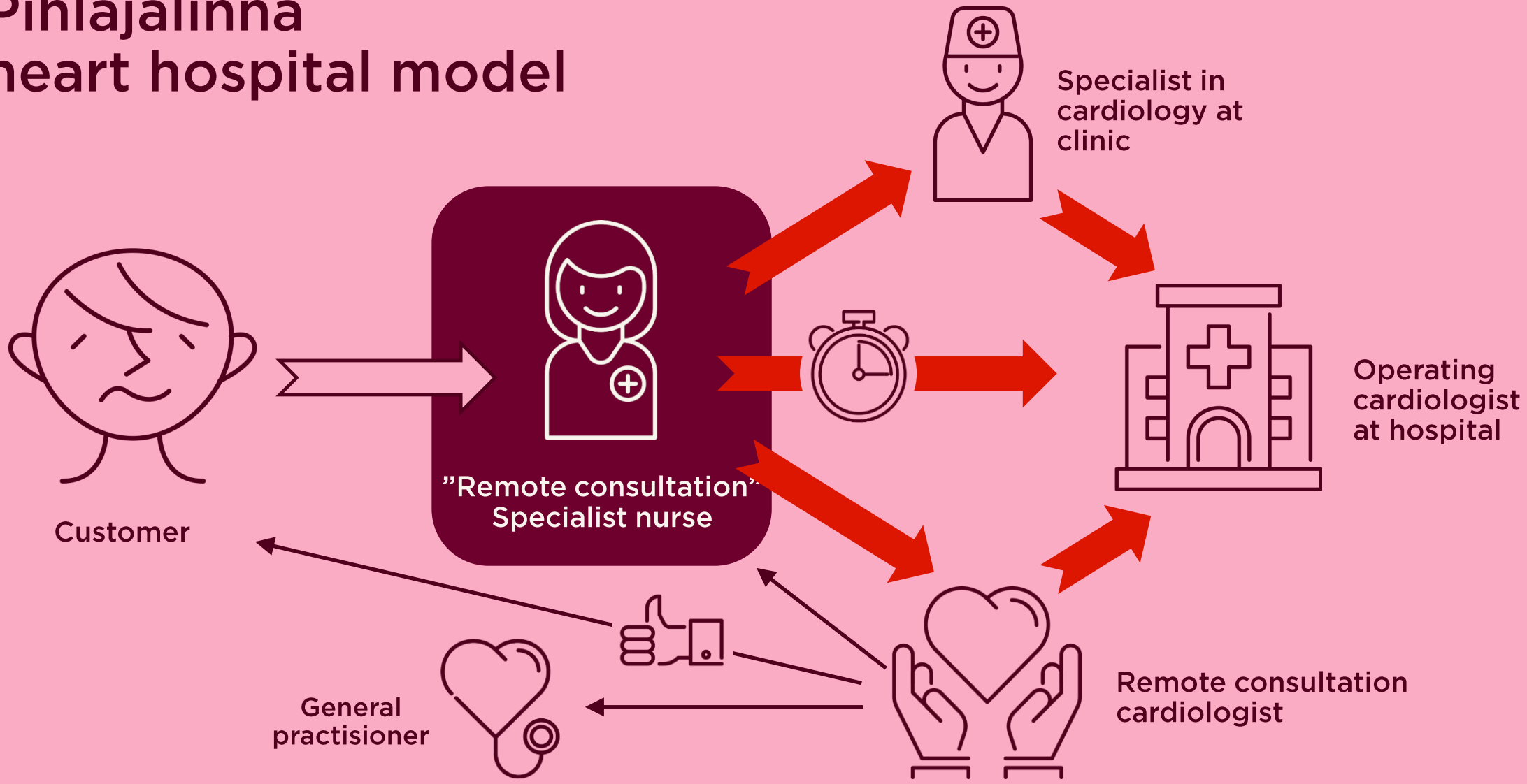
First focus on medical conditions and categories of illnesses that have major significance in society, such as the burden of chronic disease among the ageing population

Increasing the efficiency of the service path



“TYPICAL SERVICE PATH”

Pihlajalinna heart hospital model



Mission

We help Finns to live a better life

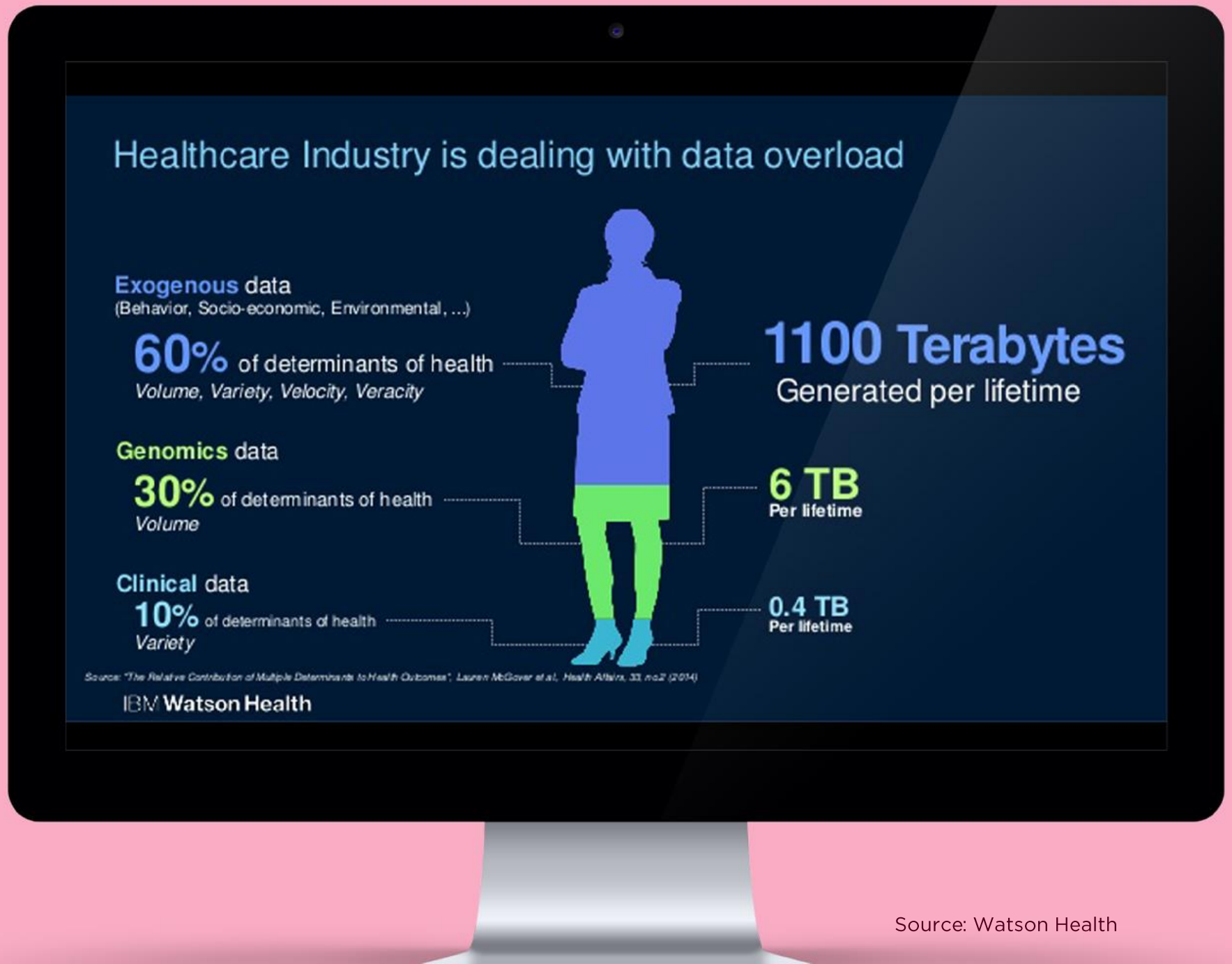
Pihlajalinna

Pihlajalinna´s services in the future

A focus on the customer and customer-owned data

Sanna Määttänen

Head of Service Development



Source: Watson Health

1

The first healthcare revolution in the early 1900s eliminated child mortality

2

The second healthcare revolution improved the outcomes of medical treatment specific to individual medical conditions

3

The third healthcare revolution will create individual health benefits and value the form of wellbeing

MEGATRENDS IN THE DIGITAL TRANSFORMATION OF HEALTHCARE

- Mobile devices
- Wearable smart devices
- Cloud data
- Social networks
- Big data and data ecosystems

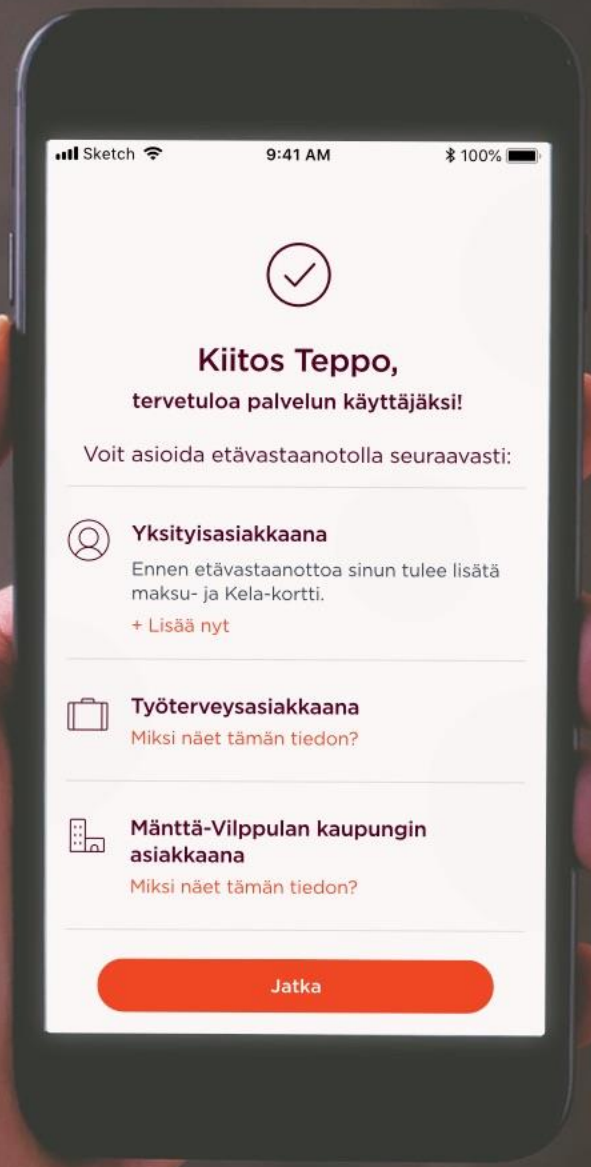
Coaching and bidirectional communication

My genetic data
Smart risk calculators

My exercise data

Physician and nurse 24/7

My networks



Health data from specialized care

Health data from primary care

The customer´s own wellbeing data

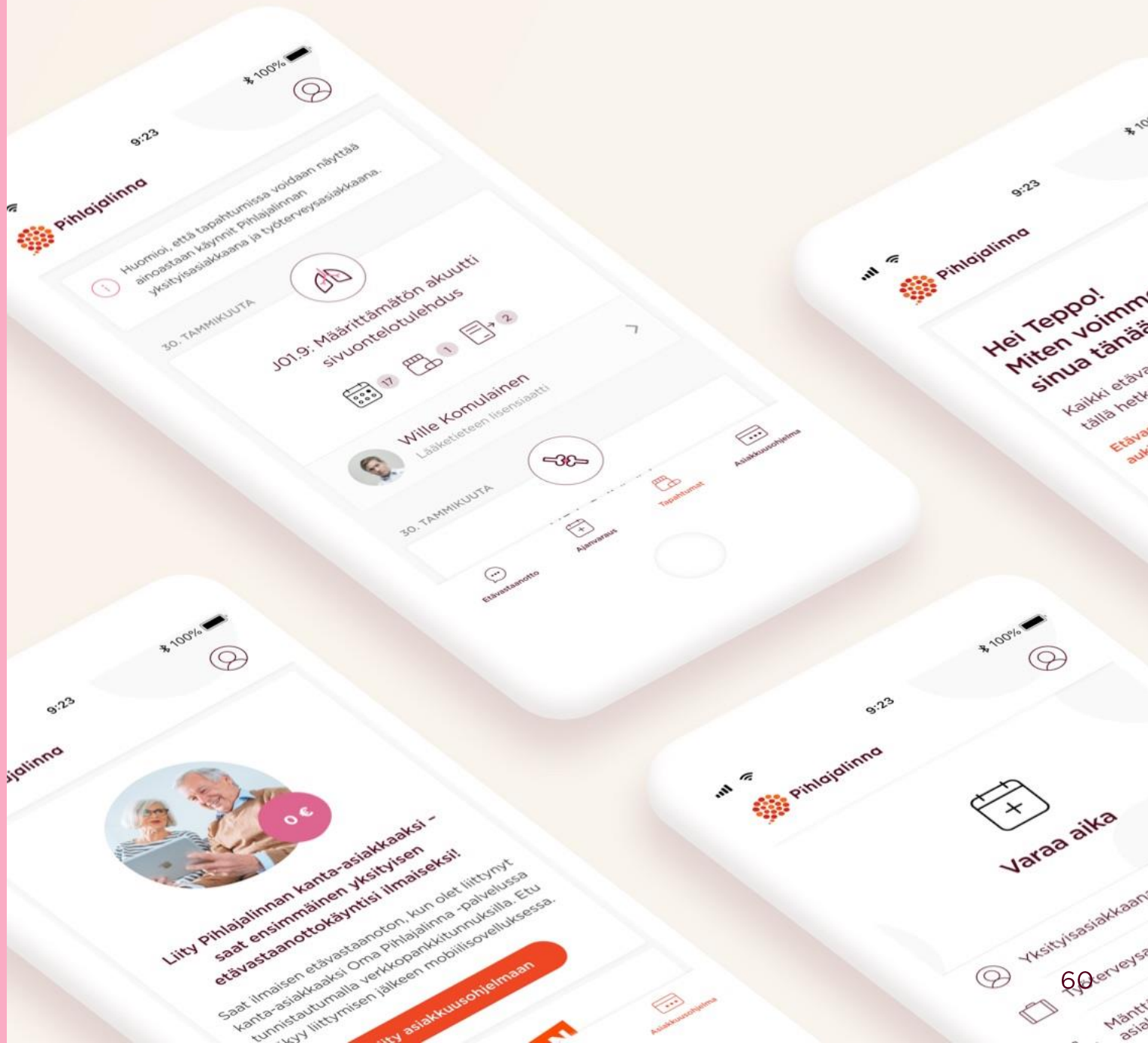
Smart bracelet

My medical data

Bidirectional coaching communication

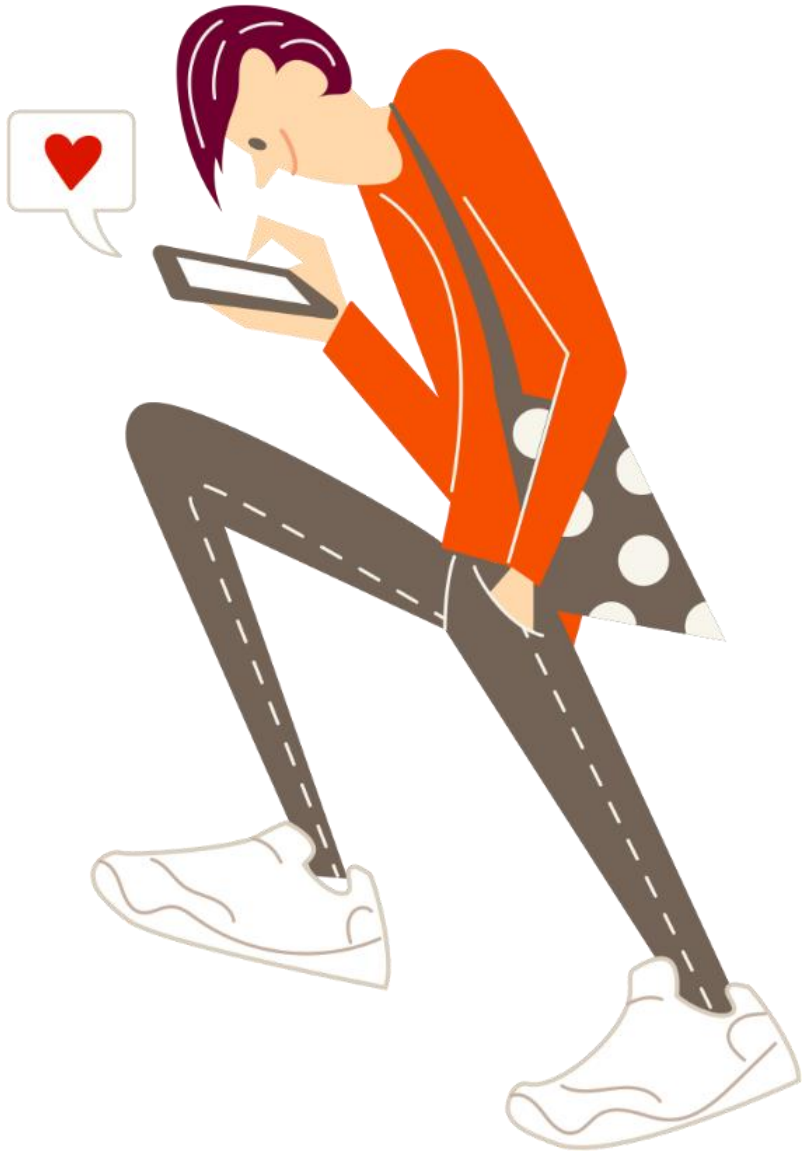
Shared view between professional and the individual

Health and wellbeing that creates commitment and value

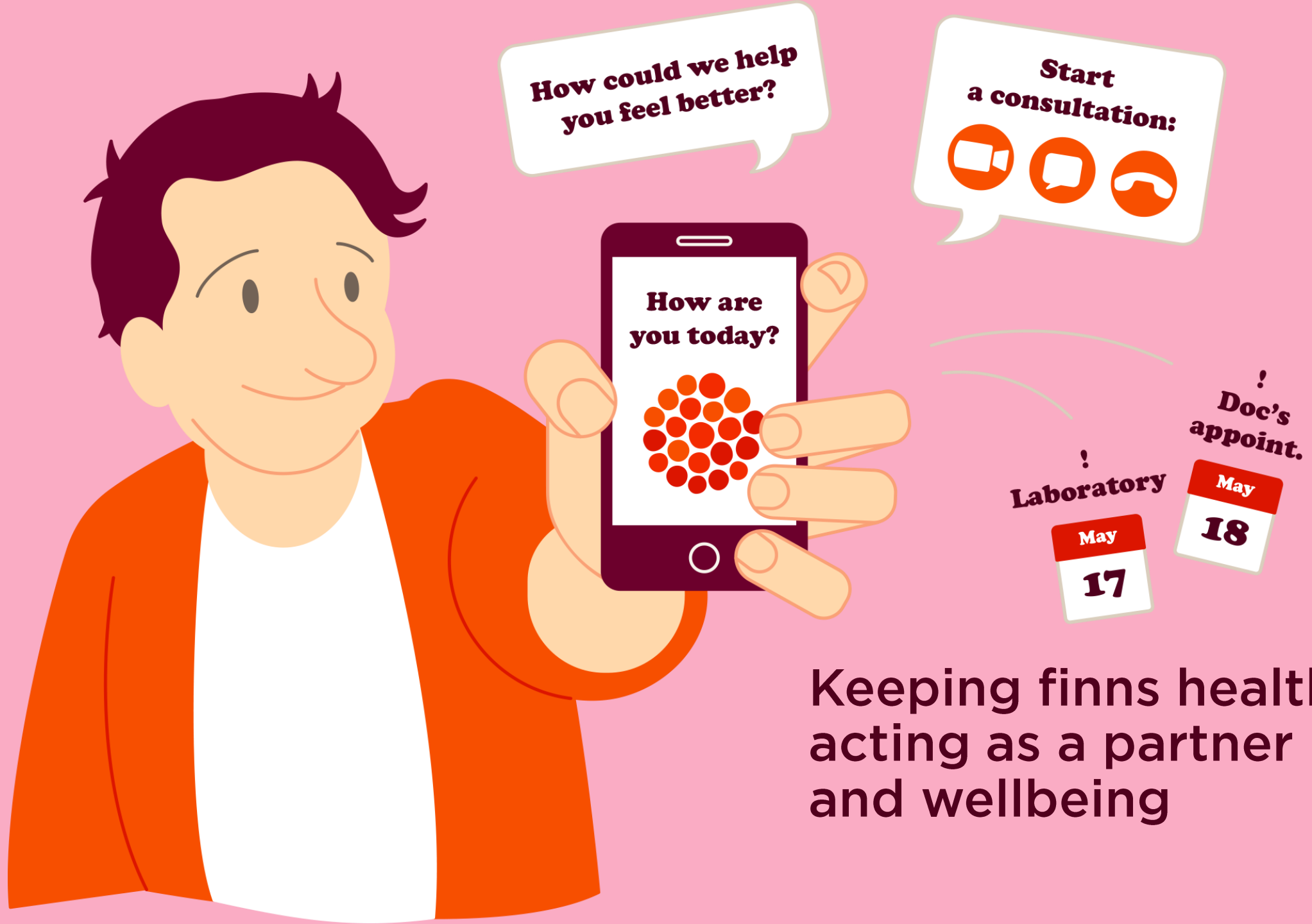


Healthcare that creates value

- **Customers:** An equal, engaging, motivating and inspiring ecosystem that creates genuine health benefits
- **Organiser:** Society's total costs decrease when the funding model is based on the creation of overall value
- **Value creation:** Determined by the effectiveness of the care chain and the health benefits perceived by the individual
- **To be developed:** Value-driven steering of service provision, transparency, comparability and interactivity with citizens, service providers and organisers alike

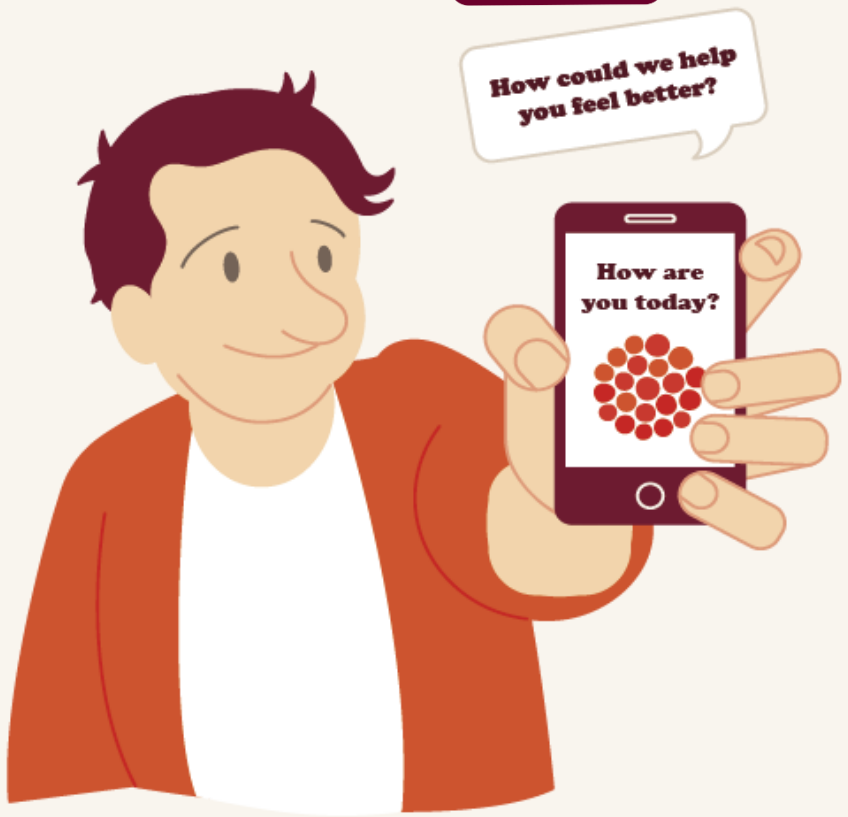


A customer through all stages of life



Keeping finns healthy and acting as a partner in health and wellbeing

Service availability and accessibility now...



...and in the future

Time for genuine encounters

A letter to my doctor:

“Give me time. Talk to me. It’s better to talk too much than not enough. I want you to express the thoughts in your mind. Even if I don’t understand it all, it’s important for me to hear it.”

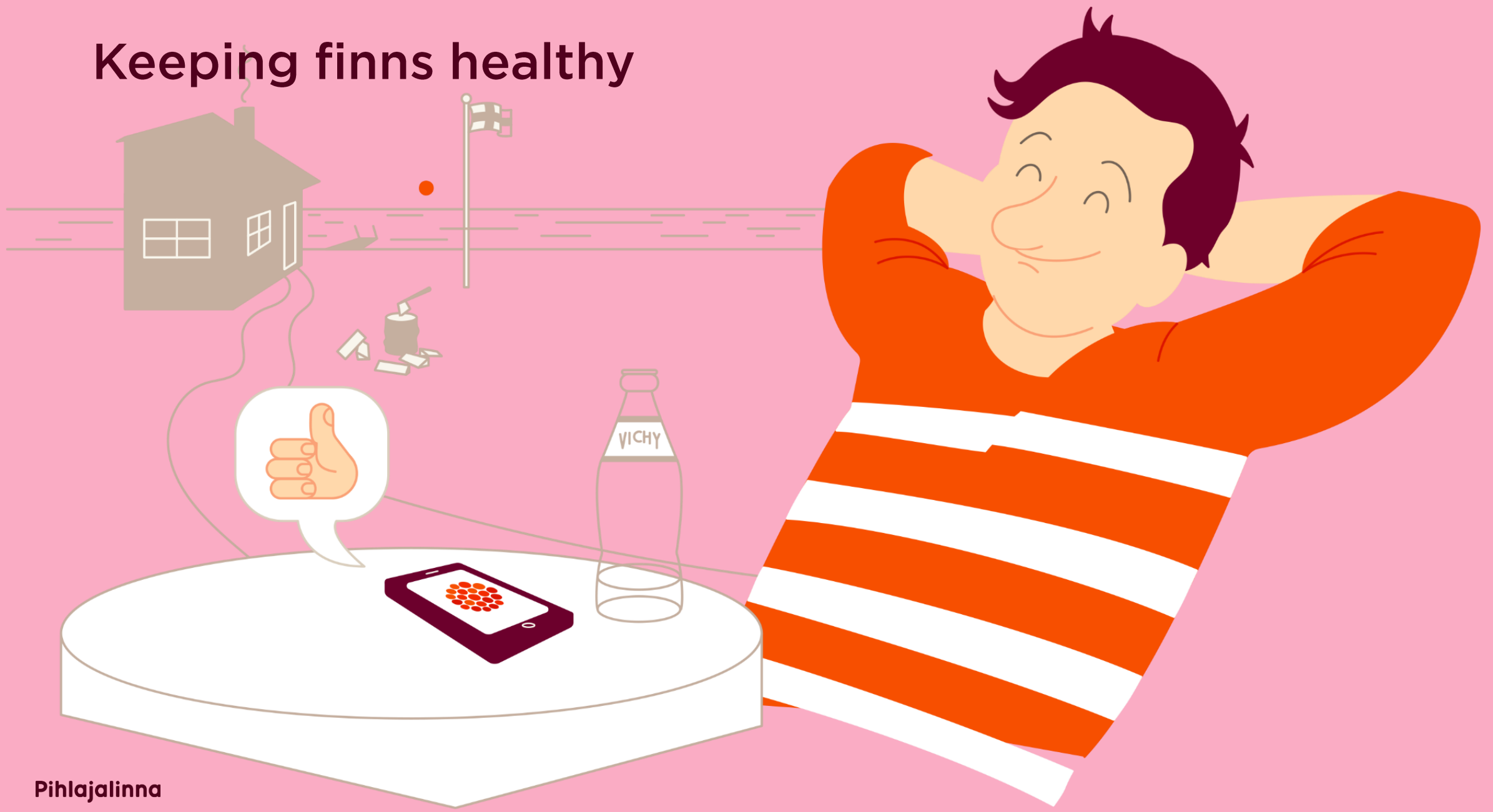
Hannu Ollikainen

Finnish Medical Journal Blog

20.2.2019

Pihlajalinna

Keeping finns healthy



Thank you!