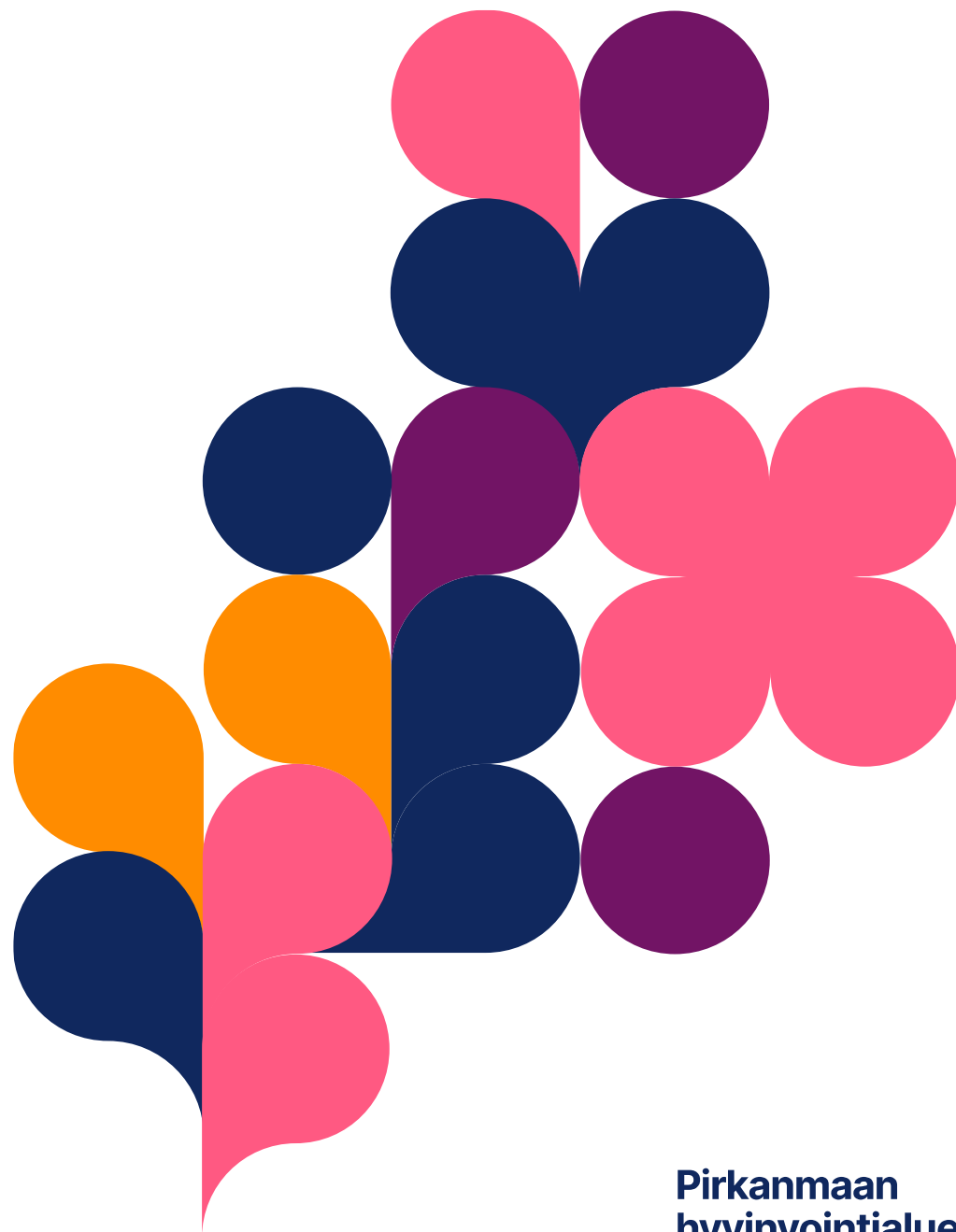


Knowledge-based management in health and social services

CDAO Nordics
November 5th, 2025

Emil Ackerman
Chief Data Officer
Wellbeing services county of Pirkanmaa



Wellbeing service counties since 2023

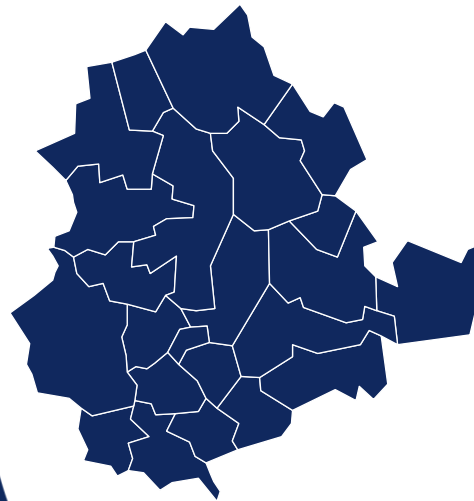


Pirkanmaa Wellbeing Services County: 23 municipalities and Pirkanmaa Rescue Services

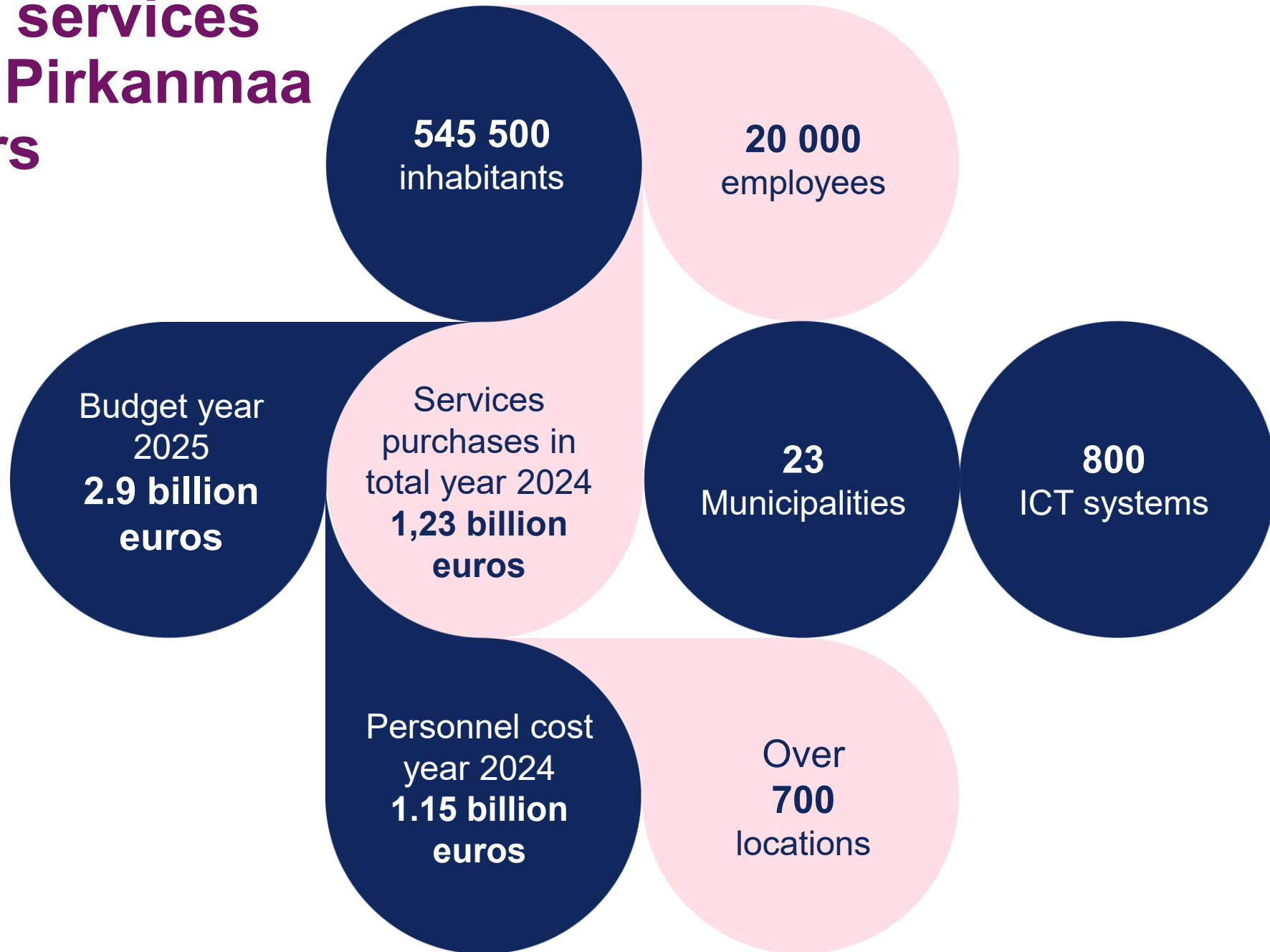
Pirkanmaa municipalities

The Wellbeing Services County of
Pirkanmaa covers 23 municipalities:

Akaa, Hämeenkyrö, Ikaalinen,
Juupajoki, Kangasala, Kihniö,
Kuhmoinen, Lempäälä, Mänttä-
Vilppula, Nokia, Orivesi, Parkano,
Pirkkala, Punkalaidun, Pälkäne,
Ruovesi, Sastamala, Tampere,
Urjala, Valkeakoski, Vesilahti, Virrat,
and Ylöjärvi.

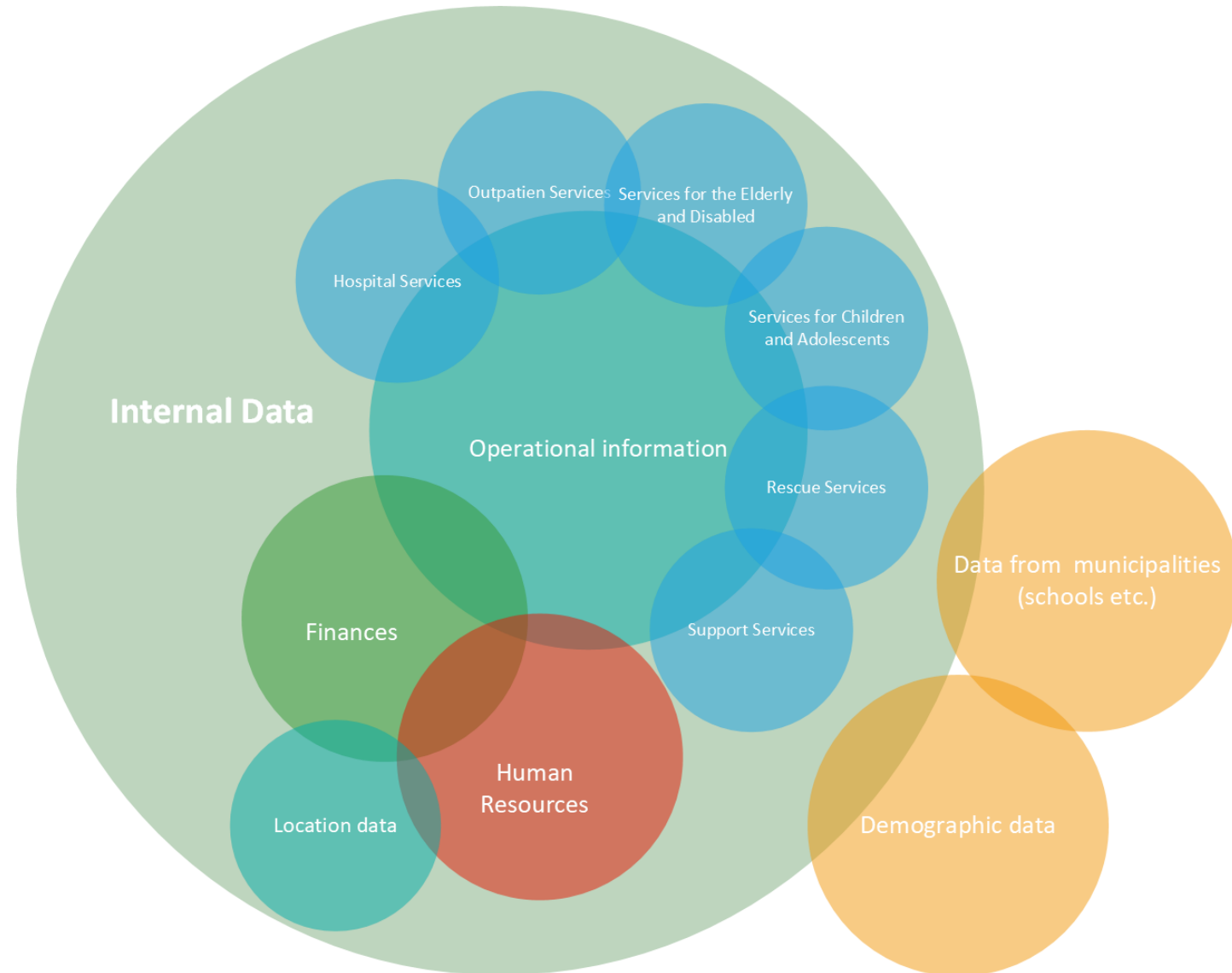


Wellbeing services county of Pirkanmaa in numbers

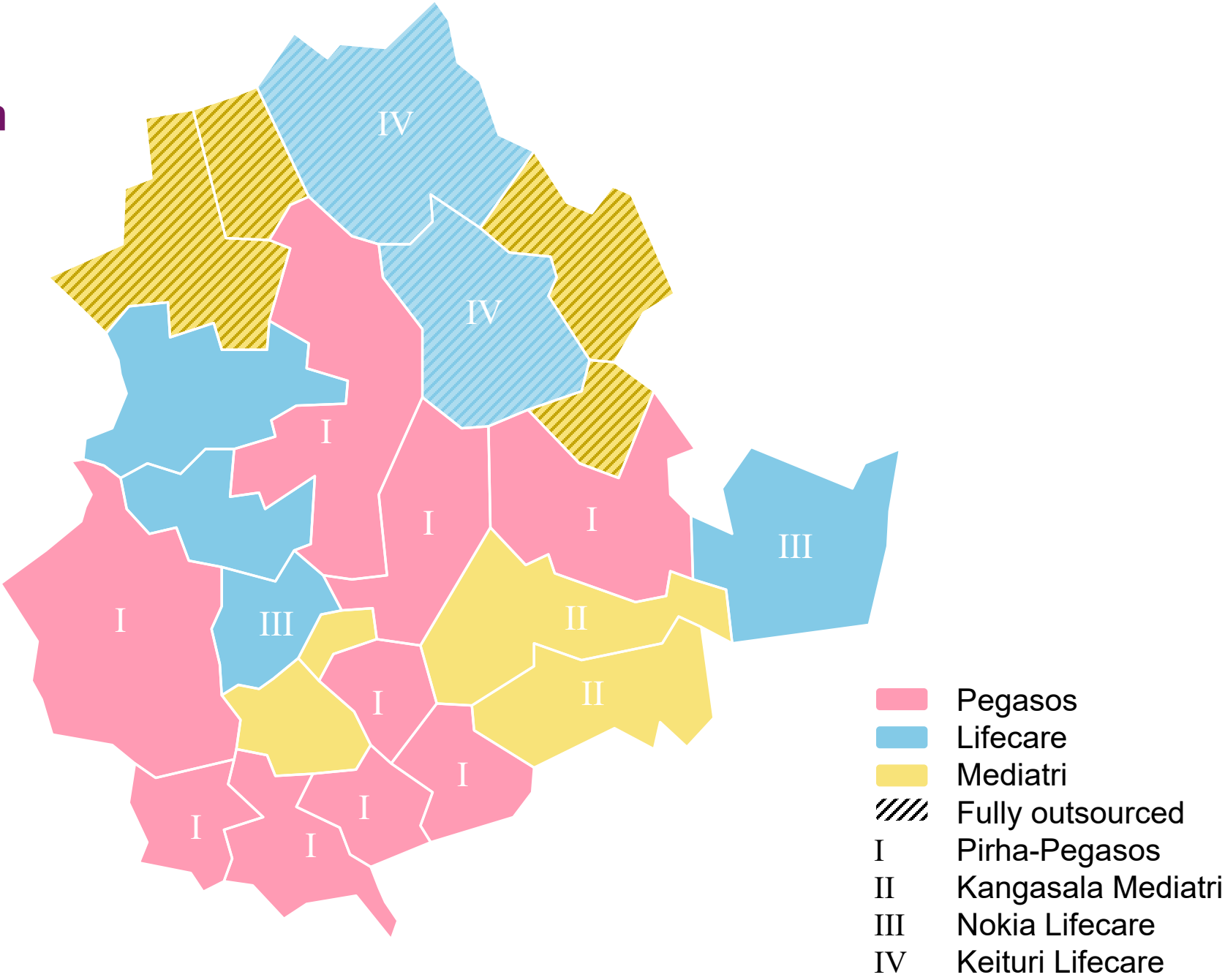


Our data

- Data from operations and from operational environment consist of several areas.
- Relevant data are often scattered across several information systems.
- Decision-making needs information combined and refined from several data sources.

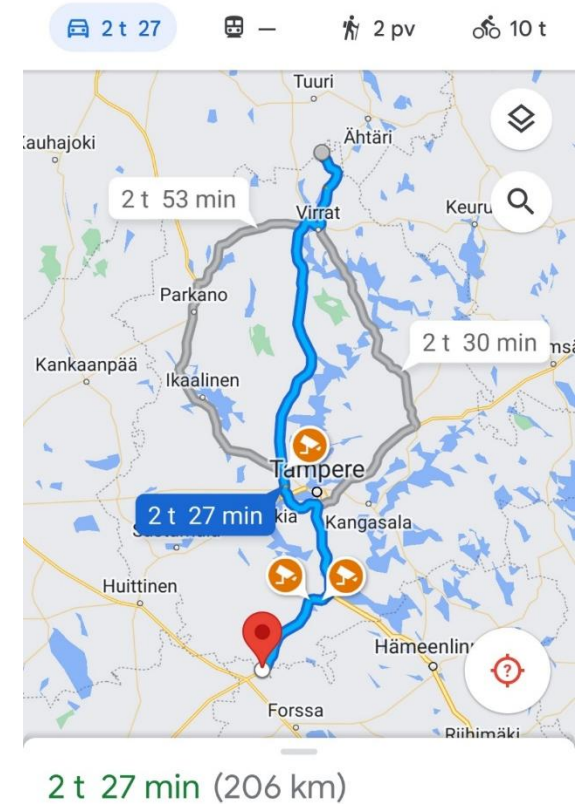


EHRs in primary care in Pirkanmaa in 2023



Current range of data utilization

Everything between star navigation and modern navigation



Amount of manual work

Pirkanmaan
hyvinvointialue

Vision for knowledge management



Towards better knowledge management
and integrated health and social services



Right information
at the right time
in the right format
to the right people

Knowledge management in Wellbeing services county of Pirkanmaa

Process



1. Data production

2. Data refinement

3. Data utilization

Goals

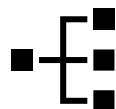


Data are reliable, comparable,
and of high quality

Information is accessible
quickly and in a timely manner
at all levels of the organization

Data-driven management is
systematically utilized in leading,
steering, and development of
operations

Set of measures



Improving data quality

Synchronizing national
knowledge management

Increasing access to data
sources

Co-development of visual
reports

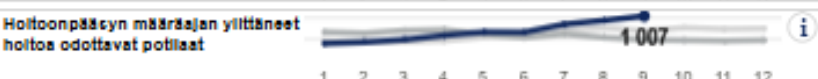
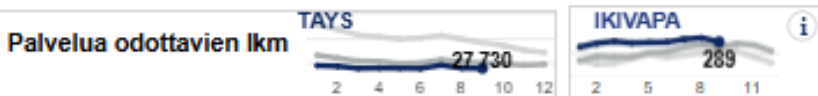
Change management

Development of value-
based health care

Organizational big picture: Management dashboard

Operational KPIs

Customers

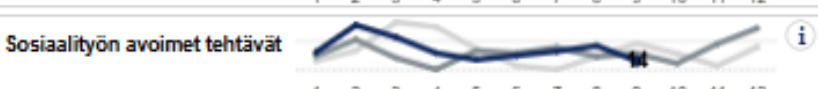


Organization



Human Resources KPIs

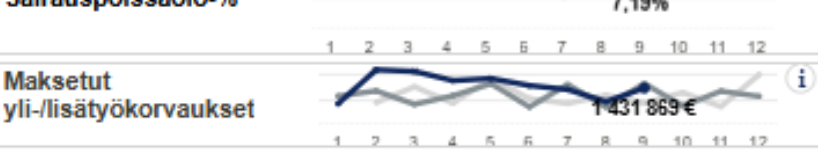
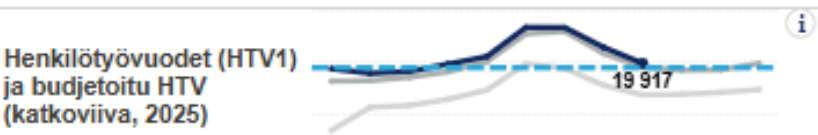
Availability



Retention



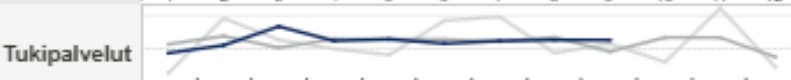
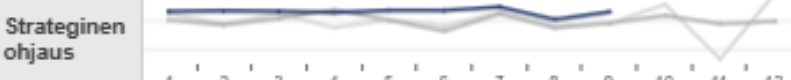
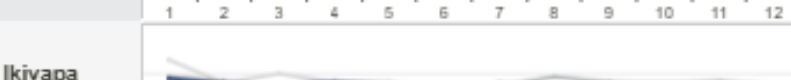
Sufficiency



Financial KPIs

Operating margin

Toteuma, 2025 Toteuma, 2024 Toteuma, <>



Support for daily management in wards

Number of hospital beds and patients

Käytössä olevat sairaansijat



Potilaat



Kuormitus



Number of arriving and leaving patients

Sovittu



Tarjolla



Tulossa huomenna



Odottaa jatkohoitoa

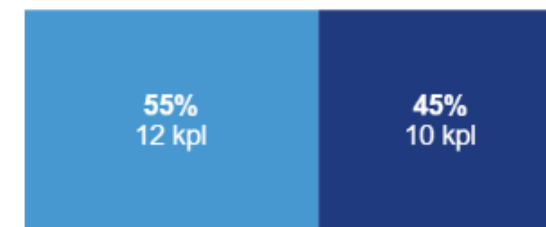


Kotiutuu/Siirtyy



Oberon 0 UOMA 0

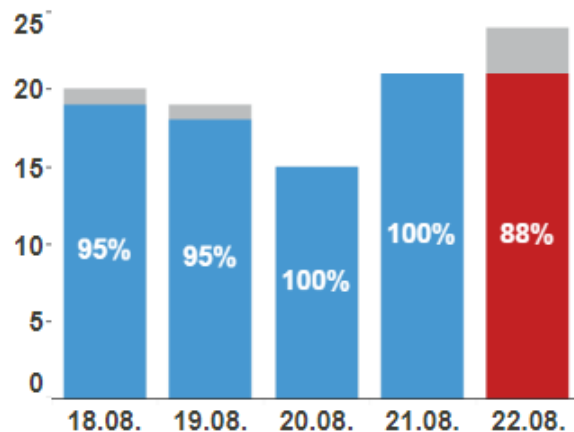
Acuteness of care



- Kiireellisenä alkanut vuodeosastohoito
- Kiireettömänä alkanut vuodeosastohoito
- Virheellinen kirjaus

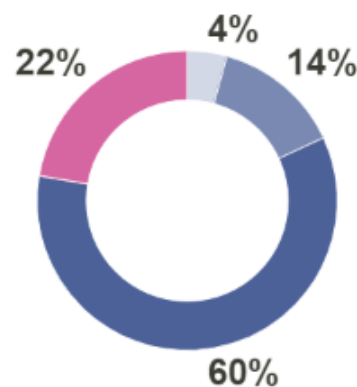
Aineisto päivitetty: 22.08.2023 (Edellisenä päivänä klo 22 mennessä kirjatut hoitoisuustiedot päivittyvät tähän kuluvana aamuna aikaisintaan klo 9:15.)

Patient categorization status



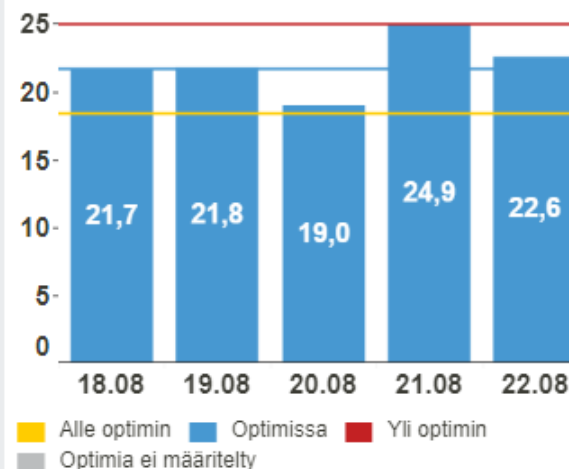
- Luokitelun kattavuus 90% tai enemmän
- Luokitelun kattavuus alle 90%
- Ei luokiteltu

Patient categories in last 5 days



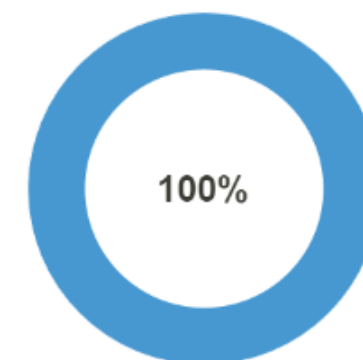
- 1 matala
- 2 kohtalainen
- 3 kohtalaista suurempi
- 4 vaativa
- 5 erityisen vaativa

Burden/nurse



- Alle optimin
- Optimisissa
- Yli optimin
- Optimia ei määritetty

Optimal burden



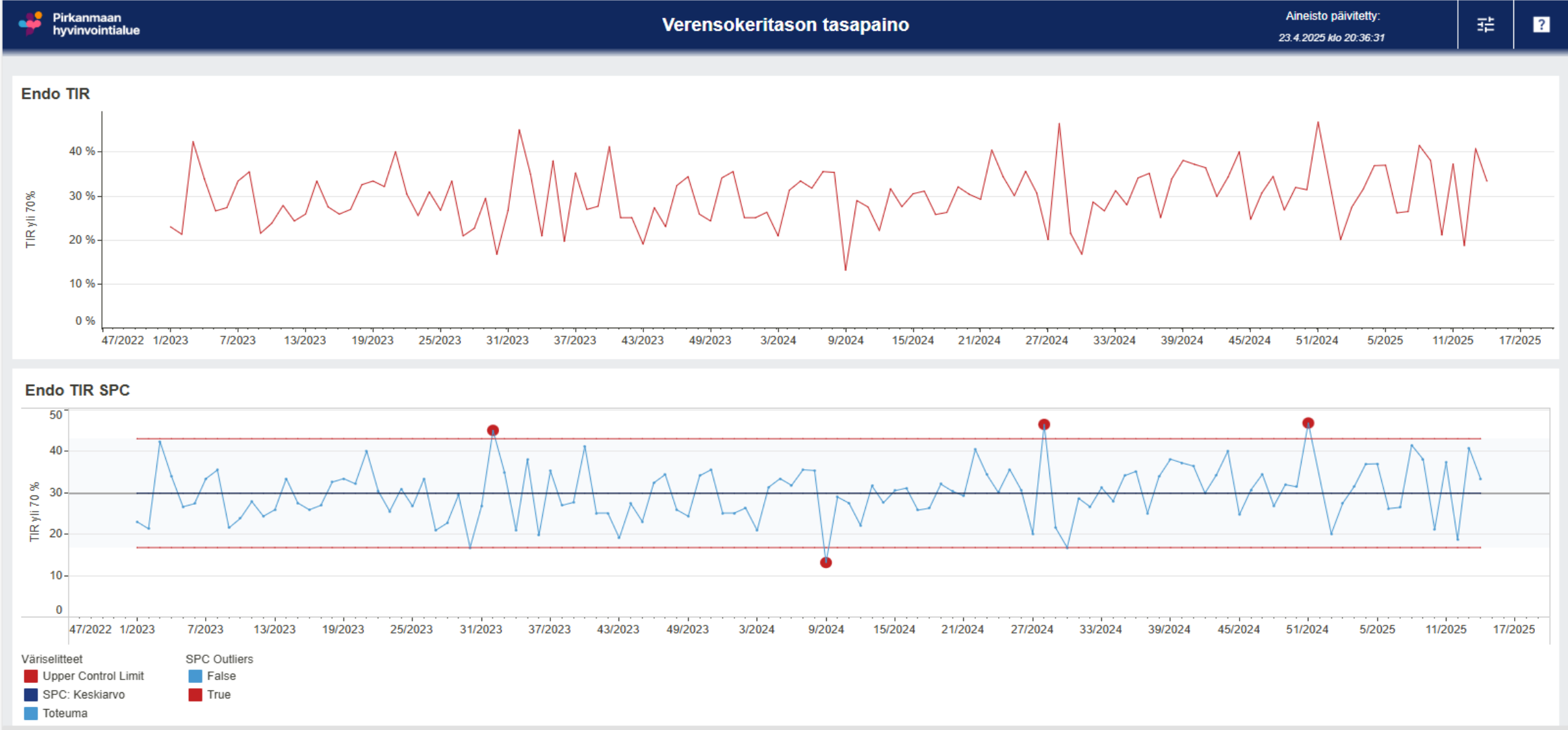
- Alle optimin
- Optimisissa
- Yli optimin
- Optimia ei määritetty
- Hoitoisuuspisteet puuttuvat

Optimaalinen hoitoisuus edelliseltä 5 päivältä. Optimaalinen hoitoisuus on 21,66 pistettä, alaraja on 18,40 pistettä ja yläraja on 24,90 pistettä.



Thoughts about the future

Targets and automatic outlier detection



Social and health care staff 2.0

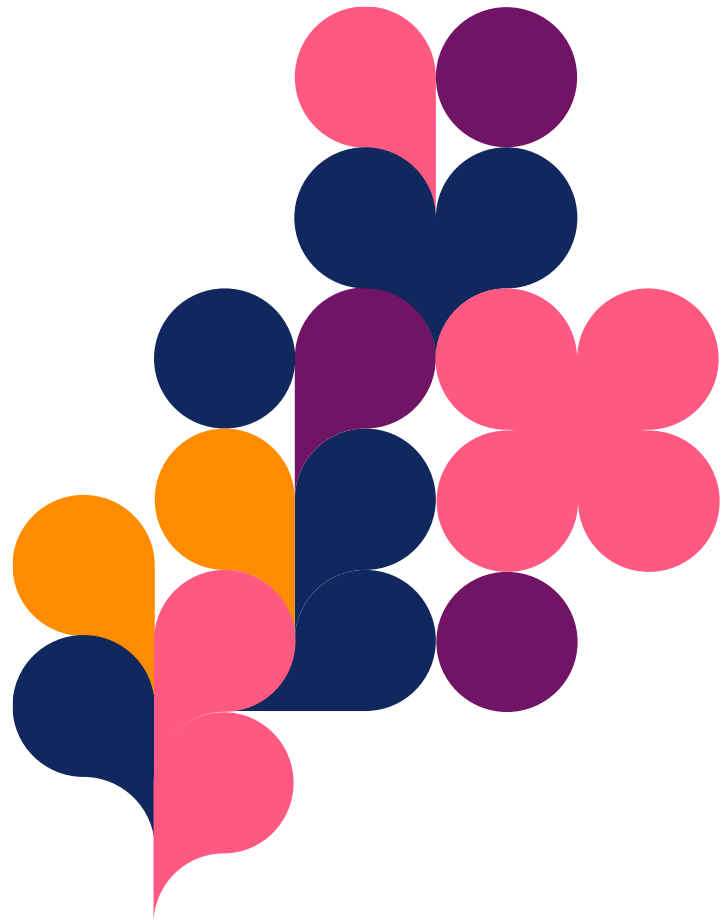


Pirkanmaan
hyvinvointialue

Ruy López Opening: Morphy Defense, Closed				
6. ♖e1	38 214	37%	39%	24%
6. d3	3 745	39%	40%	22%
6. ♗xc6	2 642	34%	42%	24%
6. ♔e2	1 667	41%	31%	28%
6. d4	712	34%	38%	29%
6. ♞c3	411	31%	38%	31%



Towards better knowledge management and integrated health and social services



Contact

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pirha.fi

