Solutions of digital public health systems in Finland

Markku Tervahauta
Director General
23.4.2021
Finnish Institute for Health and Welfare
We promote health and welfare through active stakeholder cooperation

- Population health, functional ability and involvement are improved
- People’s ability to take care of their own and their loved ones’ welfare is strengthened
- We work to build an equal and sustainable society
- We look after those who are the most disadvantaged
We exert influence in national and international forums

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>Expert memberships in different steering groups and advisory bodies</td>
</tr>
<tr>
<td>230+</td>
<td>Statements on legislative proposals and for parliamentary consultations</td>
</tr>
<tr>
<td>100+</td>
<td>International organisations in which we participate and are members</td>
</tr>
<tr>
<td>60</td>
<td>EU-funded research and development projects</td>
</tr>
<tr>
<td>700</td>
<td>Scientific articles in international peer-reviewed journals</td>
</tr>
<tr>
<td>30</td>
<td>Academy of Finland research projects</td>
</tr>
<tr>
<td>8 million</td>
<td>Individual visits to the thl.fi web service</td>
</tr>
<tr>
<td>1.3 million</td>
<td>Articles and books downloaded from the open Julkari database</td>
</tr>
<tr>
<td>9.5 million</td>
<td>API queries in the Sotkanet data bank</td>
</tr>
</tbody>
</table>
We have unique data sets

THL has the most extensive and comprehensive data sets in the social welfare and health care sector. The data gathered by means of population surveys describe such aspects as respondents’ lifestyles and service use. Our registers provide data to support the development of social and health services.

Examples:

- 1 billion data entries in databases
- 7.5 million biobank samples
- 50+ years of population survey data sets
- 16 social and health care registers

New openings
- Quality registers
- Possibility of using Kanta patient data
- Utilisation of genetic data

Information sources
- Sotkanet.fi
- Terveytemme.fi
- Database cubes and database reports
- Biobank

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We offer solutions and support

We support the organisation of services, decision-making and leadership. We offer operating models for health and welfare promotion as well as information for maintaining professionals’ competence.

Examples:

Comparative data
- Counties’ social and health care evaluation reports
- Health promotion in municipalities (TEAviisari)
- Status of Older Person Services survey

Operating models
- FINGER, an operating model for preventing cognitive impairment
- A six-step model of palliative care
- The social welfare and health centre of the future

Information through training and on the web
- Training on record-keeping
- TerveSos events
- National Public Health Days
- 8 million visits to thl.fi

Services for the population
- Nollalinja domestic violence helpline
- Shelters for victims of domestic violence
- Vaccination programme
- Food composition database Fineli

Anticipation of phenomena
- Changes in morbidity and risk factors
- Health and welfare impacts of climate change

We are committed to the UN’s Agenda 2030 sustainable development goals and promote

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Thinking fast and slow is needed in decision-making.

Daniel Kahneman

THL serves

We engage in high-quality and effective research and expert work as well as produce information for our stakeholders.
Realtime online reporting of confirmed Covid-19 cases and tests in Finland

Markku Tervahauta, THL (Finland)
Koronavilkku mobile solution for contact tracing in Finland

Markku Tervahauta, THL (Finland)
Web-based medical device Omaolo Covid-19 symptom self-assessment checker in Finland

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23.4.2021
Realtime online reporting of Covid-19 symptoms based on Omaolo symptom checker in Finland

Self-reported coronavirus symptoms

The symptoms map displays information reported by individuals through the coronavirus symptoms checker of the Omaolo service.

The map only includes information from the cases in which the service, on the basis of the reported symptoms, recommended the user to contact health care services or from the cases in which the respondent reported the selected symptom. More information on the material and the displayed information is available at the end of this text.

The number of the reports is shown in proportion to the population of the hospital district or municipality (per 100,000 residents). If the number of reports from a municipality is less than five, the information is not shown on the municipality level. By choosing from the map you will see the reports by hospital district. The drop-down menu in the top right corner opens the selection for regions. The information has been compiled and analyzed by the Finnish Institute for Health and Welfare (THL). The symptoms map is updated daily at 12 noon.

The Omaolo symptom checker is

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23.4.2021
Omaolo symptom checker questionnaires referred from Koronavilkku mobile solution in Finland

Per cent (%)

2.-3. wave

Date

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Private sector healthcare providers’ dashboards in Finland

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Private sector healthcare providers’ dashboards in Finland

Number

60 000

50 000

40 000

30 000

20 000

10 000

0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53

Suomen Terveystalo Oy

Mehiläinen Oy

Calendar week

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23.4.2021
Public primary healthcare remote contacts by month in 2018–2021 in Finland

Number

1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0

2018 2019 2020 2021

Calendar week

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### Use (%) of *My Kanta Pages* by Adults by Primary Healthcare Organizer Areas and Hospital Districts in 2018

<table>
<thead>
<tr>
<th>Age group</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18 years</td>
<td>1.9M</td>
<td>2.2M</td>
<td>2.4M</td>
<td>2.7M</td>
</tr>
<tr>
<td>% Adults</td>
<td>42%</td>
<td>49%</td>
<td>54%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Adults = at least 18-year-old persons

**Use (%) of *My Kanta Pages* by Adults by Primary Healthcare Organizer Areas and Hospital Districts in 2018**

<table>
<thead>
<tr>
<th>Age group</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18 years</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>18–35 years</td>
<td>51%</td>
<td>58%</td>
<td>68%</td>
</tr>
<tr>
<td>36–50 years</td>
<td>49%</td>
<td>57%</td>
<td>67%</td>
</tr>
<tr>
<td>51–65 years</td>
<td>51%</td>
<td>58%</td>
<td>64%</td>
</tr>
<tr>
<td>&gt;65 years</td>
<td>37%</td>
<td>45%</td>
<td>48%</td>
</tr>
<tr>
<td>66–75 years</td>
<td>55%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>&gt;75 years</td>
<td>28%</td>
<td>32%</td>
<td></td>
</tr>
</tbody>
</table>

Markku Tervahauta, THL (Finland) 23.4.2021
Diverse knowledge, competence and an ability to build a better tomorrow.

Markku Tervahauta
Director General

This is THL
Meaningful work for the welfare of us all.
Our organisation

We operate in the administrative branch of the Ministry of Social Affairs and Health

Director General
Deputy Director General, Knowledge and data
Deputy Director General, Research, Development and Innovation

Communications • Findata

Public Health and Welfare
Knowledge Management and Co-Creation
Welfare State Research and Reform
Population Health
Health and Well-Being Promotion
Equality

Health Security
Infectious Disease Control and Vaccinations
Expert Microbiology
Environmental Health

Government Services
Forensic Medicine
Forensic Chemistry
Special Services

Information Services
Data and Analytics • Digital Solutions • Health and Social Services Data and Information Management

Enabling Services
Biobank • HR and Finance • Development and Guidance • Support & Safety and Security

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