Audit of the Finnish National Institute for Health and Welfare (THL) by an international panel

Main messages

The Finnish Ministry of Social Affairs and Health (MSAH) convened this international panel in the second half of 2022 to review the performance of the National Institute for Health and Welfare (THL) with a particular emphasis on its future-oriented tasks.

THL is a world-leading institution in its field. Its core functions include infectious disease and pandemic prevention, preparedness and response and data collection together with a substantial number of specific 'government' health and social care services. Research and knowledge production are central functions which form a strong basis for its other responsibilities. The MSAH is the main funder, but THL also receives funding and commissioned tasks from other ministries and government agencies as well as from the Academy of Finland and the EU through competitive research projects. Part of the analytical work of THL encompasses several sectors beyond health and social services.

Over the past decade, THL has undergone budgetary constraints in the wake of the financial crisis and increasing complexities due to its widespread responsibilities, particularly so during the recent COVID19 pandemic. On the whole, THL has handled these challenges with considerable success. However, THL now does face several new complexities including, among others, a major reform of health and social services and the rapid evolution of data sciences. Moreover, as a national public health institute, THL needs to continue strengthening its role in national health security and pandemic preparedness.

The international panel believes that the chances of successfully continuing THL's current and new tasks will be maximized with a strategic repositioning of the organization. The internationally unique health and social services reforms in Finland will call for putting more emphasis both on policy-oriented research and development functions and on health and social system reform evaluation and performance assessment. This may add (further) pressure on (i) the governance relationship between the MSAH and THL; (ii) the potential conflict between THL´s independent research and the research studies commissioned by the MSAH and/or other authorities to respond to politically defined priorities; and on (iii) the already diverse and broad ranging services that THL is requested to perform.

The international panel proposes a strategic reflection and redirection of THL's services and priorities. Most notably, THL's core research and data collection functions need to be clearly singled out and supported by dedicated resources to protect a degree of independence in initiated research and to ensure the collection of specific necessary data. This is not to say THL should have a vast array of scientific freedom and autonomy. However, scientific independence in choosing methods, interpretation, and publication must be secured. Second, THL's role as provider of certain services outside its main mandate, such as prison health services, shelters, state reform schools and other services, should be progressively assigned to either another new agency or agencies with a focus on the respective services or to some of the (largest) counties with efficiencies of scope. This may be to the benefit of both THL which can focus on its core tasks, as well as to the devolved agencies or counties. Third, although THL's legal independence needs to be protected, many of its new tasks -

particularly those associated with the new health reforms - will likely come with inherently political yet unpredictable implications and consequences. The MSAH needs to strengthen its stewardship and have grip on THL's policy-oriented activities. Such needs can be guided by a renewed and expanded agreement between both organisations setting out more explicitly the services and priorities, including a financial paragraph that deals with the consequences of new tasks for the institute. Also, the role of the THL Council in giving strategic guidance can be significantly strengthened and the composition reviewed to include important partners. A Board chaired by the MSAH advising and monitoring THL priorities and evaluating progress would be a more farreaching option. Strategic decisions could then be taken in a more coordinated and mutually agreed way between all relevant stakeholders.

The panel has, on purpose, limited itself to broad strategic advice rather than providing a detailed set of implementation recommendations. While the report goes into more depth on the actual proposals (and the rationale underlying them), the panel argues that to optimally embed such strategic repositioning of THL in the Finnish health and social system there will be need for further and more specific development of our proposals. Such follow-up should address implementation difficulties and sharpen the focus and impact of THL´s analytical work while also protecting its integrity and public profile as a trustworthy expert authority.

The panel thinks that as a result, THL can gradually shift towards an even more knowledge-based and leading organization in its core areas of promoting health and welfare and conducting assessments of the performance of the new counties. Thus, THL may secure its position as a world-leading institution in its field while supporting the health and welfare of future generations.

1. Introduction and terms of reference

The Ministry of Social Affairs and Health (MSAH) invited a team of international and Finnish experts to conduct an audit of the National Institute for Health and Welfare (THL), to assess how THL succeeds in implementing its mission to promote the welfare, health and safety of the population, prevent diseases and social problems, and develop the welfare society. The MSAH requested the audit to be future-oriented, to reflect the challenges for development in health and wellbeing of the population, and to make recommendations for further development of THL's activities.

The team comprised of Maris Jesse (Estonia) and Patrick Jeurissen (the Netherlands) as co-chairs and Josep Figueras (European Observatory on Health Systems and Policies), Tuija Kumpulainen (Finland), Kai Leichsenring (European Centre for Social Welfare Policy and Research), Ilkka Luoma (Finland), Fernando Simon (Spain) and Camilla Stoltenberg (Norway). Biographical details of team members in appendix I.

Methodology of assessment

The panel used different methods to come to its analysis and conclusion. The panel held two study visits to Finland (October 2022 and January 2023) and interviewed a total of 34 experts - on-site and through video-conferencing. The list of the interviewed experts is listed in appendix IV. Interviewees covered the whole spectrum of the activities of THL as well as its stakeholders and independent experts.The panel read many studies and documents to become familiar with the issues at hand. Appendix II provides a list of the studied documents and interviewed experts and stakeholders. The panel was supported by two local experts – Jaakko Herrala and Pekka Rissanen - who helped us in an excellent way to get and interpret the factual information.

Previous evaluation (2014)

THL was first evaluated by an international expert panel in 2014, 5 years after the establishment of THL. That evaluation focused on effectiveness of THL as a merged organisation as well as on THL's cooperation with universities and other research institutes. Recommendations were made for upgrading management processes and organisation, as well as some recommendations on scope of services, governance structures and access to data. In comparison, this evaluation is more future oriented and thus focuses on the strategic decisions that can be made.

2. Overview of THL

THL was established in 2009 by merging the National Public Health Institute and the National Research and Development Centre for Welfare and Health. THL is supposed to 1) promote health and welfare, 2) prevent diseases and social problems, and 3) develop social welfare and health care activities and services. The formal duties that connect to these overarching goals rely strongly on creating (research, expert policy advice) and collecting (statistics, monitors, registers) knowledge. Due to historical reasons and institutional issues related to the country's scale, THL also provides nationwide services for specific populations.

Legal duties

- To *study and monitor* the welfare and health of the population. This includes factors affecting the welfare and health of the people, the prevalence of these problems and opportunities for preventing them, and to develop and promote measures that improve welfare and health;
- *To study, monitor, assess, develop, and guide* social welfare and health care activities and to provide *expert assistance* for the implementation of policies, procedures, and practices that promote welfare and health;
- To engage in relevant *research and development work* and promote innovation and initiatives for developing social welfare and health care activities and services and for promoting the health and welfare of the population;
- To function as a *statistical authority* as referred to in section 2(2) of the Statistics Act (280/2004), to maintain data files and registers relevant to the field, and to take care of the knowledge base of its field of activity including its utilization;
- To develop and maintain key terminology, definitions, and classifications related to the social welfare and health care sector; and
- To *engage in international cooperation* within its sphere of activity; THL is an actor in early warning systems and cross-border health threats within WHO and ECDC.

In addition, THL has been allocated other tasks by law or by assignment from the MSAH. The law states that THL (may) provide forensic- and healthcare services when such activities are directly relevant to its research, expert, or development activities. In practice, this is mainly at the discretion of the MSAH. Currently, in addition to its role as the national expert institution in communicable diseases, national expert laboratory and national expert agency in environmental and air protection, THL is, through different mandates, of which most are set within legislation, also responsible for:

- The payment of financial compensation to war evacuees;
- Dedicated mental health-related functions and services: expert agency for special care of persons with intellectual disabilities, decisions on involuntary care, court-ordered mental examinations and involuntary treatment, and managing the two state mental hospitals;
- Ensuring of sheltered services for victims of domestic violence;
- The organization of mediation activities in criminal and certain civil cases;
- Genetic testing to establish paternity and forensic genetic paternity testing;
- Medical assessment to verify the age of those applying for a Finnish residence permit;
- Forensic autopsies;
- The guidance and management of state reform schools and the prison family unit;
- The guidance, development, and management of health care services for prisoners;
- The purchasing and storage of medicines under the national vaccination program;
- Doping testing

Governance

The institute is subordinated (at arms-length) to the MSAH. However, it is independent concerning the way they conduct their scientific research. The MSAH can assign particular tasks and duties to THL in a structural way (see above) and on a temporary basis. For example, THL has got temporary funds to support the reforms with analysis and knowledge.

The institute is headed by a director general (DG), who is appointed by the Finnish Government through a public recruitment process. The term of the appointment of the DG is five years, and there is no legal limit on the number of years he/she can serve.

The law mandates THL to have a Council appointed by (the DG of) THL. The law does not specify the tasks of the Council nor any responsibilities other than providing advice. The current Council has 20 members (appendix V) appointed from different fields and organizations. Currently, there is one member from the MSAH at the Council. The Council usually meets 5 times a year.

The institute may also have dedicated advisory boards to promote THL's purpose and scientific research within its sphere of activity and cooperation between the institute and its stakeholders.

The health and social care reforms establishes the 22 counties as new vital stakeholders. These counties were established formally in January 2023 but it still remains largely open how the relations between THL and those regions will be shaped in practice.

Organizational structure

The organization consists of four central departments: 1) Public Health and Welfare, 2) Government Services, 3) Health Security, and 4) Knowledge brokers (Data), to cover its many legal duties. They are supported by Senior management, communication, and the Department of Enabling Services.

The government social and health care services steered by THL are at arms-length from the institute, and have their own dedicated resources. The annual turnover of the two state mental hospitals is around 65 million euros; the annual turnover of the state reform schools lies approximately at 25 million euros (Final accounts, 2021).

In addition, there is a separately standing legal unit Findata, working in conjunction, but separately from other activities of THL. The role of Findata is data management, namely to grant permits for the secondary use of social and health data and to ensure that data subject to a permit is combined and disclosed in a secure manner.

Budget, sources of revenue and main expenditures

As is typical to other national public health institutes, THL receives its revenue from multiple sources, which reflect the different tasks THL fulfils. While the largest share has been from state budget funding (46-53 % of total budget during 2015-2019), the co-financed activities have constituted 32,5 - 38 % and 6,5-9% of revenue is from chargable services. (appendix VI) The pandemic response increased state budget allocation and its share in the budget temporarily for 2020-2021.

The state budget funding is negotiated within the overall government funding framework with MSAH, following a bottom-up process within THL. MSAH negotiates the funding requests with the Ministry of Finance as part of the public budget formation process. The different government services THL is responsible for have their own specified budgetary allocations in the state budget, with no re-allocation possibilities by THL.

The largest contributors of co-financing to activities are MSAH, Academy of Finland and EU, making up 84% of the total THL budget in 2021.

Personnel

The total number of person-years of THL in 2022 was approximately 1227, with a total staff of 1382 people. Among them there are 1165 full-time employees of which 886 are on permanent positions (76% of the staff). The share of reliance on permanent and temporary staff varies between departments and correlates with the stability of funding of the departments/activities. Whereas the departments responsible for government services and the 'Knowledge brokers' have mostly full-time permanent staff, the Public Health and Welfare department, which relies more on short-term project and research funding, has only 50% permanent staff, and the share of full-time employees is the lowest at 80 %. (Appendix VII and VIII)

THL struggles with specific challenges, such as how to to attract and retain talent like other knowledge-intensive organizations. Several stakeholders are concerned about the lack of competitiveness in the salary levels of THL, which may be a risk factor in taking on the role needed in research and supporting the reforms. Nevertheless, the institute has created a high level of well-being for its employees. Overall job satisfaction is higher than at the central government and has increased from 3.4 (2013) to 3.8 (2021) on a 5-point scale (Final accounts, 2021: Table 15). This panel advices to be alert that THL keeps its ability to recruit the talent and competences that are needed for its tasks.

THL and research

Approximately one third of THL's staff is mostly involved in research, development and innovation and expert work (30-36% of staff during the last five years). In 2022, there were over 60 EU-funded research projects at THL, and 30 projects funded by the Academy of Finland. Annual scientific output during the last five years has been 725-967 peer-reviewed articles/reviews; and another 46-59 scientific monographs. Besides, THL produces publications for professionals (220-366 annually), and for the general public (30-40 annually).THL gives also expert statments at Parliamentary hearings (40-60 annually in pre-pandemic years, with an increase to 137 in 2021) and also issues over 100 other policy statements annually, with an increase during the pandemic to 316 statements (2021).

THL's research activities were regrouped (2018) into four multidisciplinary thematic areas, highlighting the primary research fields and strengths. The overarching research focus has been defined as planetary health and wellbeing, achieved through four research, development and innovation programs.

Population health and wellbeing: Monitoring and foresight

Covers monitoring the health and wellbeing of the population and determinants of the health through register-based data (hospitalizations, infections, etc.) and population-based

health (examination) and welfare surveys (lifestyles, need for social and healthcare services, sociodemographic determinants, etc.). Forecasting of the possible impact of identified drivers (e.g. demographic or legislation changes) on risk factors and disease burden, as well as preparedness for new epidemics/pandemics and other health and welfare crises. Program aims to provide information on current health status and seek to identify the possible challenges and possibilities for population health and wellbeing.

Performance of social and healthcare services

Research into social and health care evaluates alternative means to provide social and health care services by system-level analyses of effectiveness, quality, and cost-efficiency of services, while considering the needs of specific groups, service integration and the compatibility between services, social benefits and income. The program seeks to support the development and coordination of interaction of health and social service systems.

Just society

This program studies socio-demographic and regional differences in well-being, health, safety, living conditions and economic resources, residential segregation, and social, economic, and ecological sustainability, including climate change. This program aims to identify mechanisms behind inequality and disparities in health and well-being, and to look for solutions through welfare and health policies.

Safe and healthy living environments

This program has four main themes: natural environment; built environment; social environment; and the food environment. The program aims to provide information and guidance regarding health effects of biological, chemical, social and physical factors, and their interactions. Other themes are prevention of environmental health and welfare hazards.

Public and stakeholder perception of THL

The Ministry has a practice of conducting regular surveys among stakeholders and media on the perception of performance of the Ministry and its agencies (Aula Research, 2021; Mediabarometer 2020, 2021). THL has been one of the highest rated institutions in these surveys, which is a remarkable outcome especially during the pandemic years. It demonstrates societal trust in THL, understanding of societal expectations by THL and an ability to respond to these expectations. The highest recognition was given to THL's expert-knowledge, its trustworthiness and impact. THL was assessed as participating in an appropriate manner in societal debates concerning its field of activity. The pandemic has considerably increased the visibility and public impact of THL.

3. Main Challenges

Reform of healthcare, social welfare and rescue services

THL is already witnessing important future oriented challenges. On 1 January 2023, the responsibility for organizing healthcare, social services and rescue services has been transferred to 22 new wellbeing services counties (and a special status for Helsinki and Helsinki University Hospital). These counties hold democratic legitimacy, as the new county councils are elected by popular vote. Five collaborative areas have been appointed for certain specialized services. As in the past, the private and third sector complement public services (particularly occupational health services) and may provide services on behalf of the public authorities.

The establishment of these counties is a very significant reform, also in comparison with earlier reforms across the globe. It aims to secure equal, high-quality, and economically sustainable services. A focus on better coordination between the health and social sectors, including multi-sectoral primary services (integrated care) are underlying corner stones. The overall social and health services reform is governed by a set of new laws. The legislation package contains several new tasks to THL that will probably substantially change its role and have an impact on its internal functioning.

Section 21 of the new Act on the organization of social and health services stipulates that the general direction, planning, development and control of social and health services is the responsibility of the MSAH. Furthermore, according to Section 22, the State Council confirms the national strategic goals for the organization of equal, high-quality and cost-effective services every four years. These goals must be based on a report (Section 31) of the MSAH and any other relevant monitoring data. The goals must take into account the fiscal policy goals, set by the government. According to Section 24 of the Act, the MSAH annually negotiates separately with each county regarding the implementation of its social and health services tasks. The Ministry of Finance participates in these negotiations.

Section 29 states that counties must monitor the well-being and health of the population in its area. This includes coordination of services, the costs and the productivity of social and health care. The counties must compare their performance with peers. The data structure is standardized by THL. Standards set by THL will thus influence how stakeholders perceive the success of the reforms. The MSAH has the authority to specify performance indicators that the counties, at a minimum, comply to.

Section 30 states that THL (Department of Public Health and Welfare) prepares an annual expert assessment on the nationwide performances (population well-being and health, development of needs, availability, quality, effectiveness, equality and coordination of services, need and effects of investments, costs of care, their development and their productivity). In addition, they evaluate measures whose implementation in the counties is necessary from the point of view of cost management or other relevant policy-goals. THL's Department of Public Health and Welfare must submit expert assessments to the MSAH and needs to publish them on the public website.

Furthermore, and for the purpose of preparing expert assessments, Valvira (national agency operating under the MSAH, charged with licensing and supervision/inspection of social and health care) and each Regional State Administrative Agency (RSAA) annually prepare a report on the equal implementation of social and health care in each county separately, based on the information received in connection with their supervision tasks. Valvira and the RSAAs must submit a report to THL and the MSAH. THL's Department of Health and Welfare also uses the surveys of the counties (Section 29), when preparing their expert assessments.

The MSAH (Section 31) should prepare an annual national report which, among other things, assesses the equal realization of social and health care goals across the counties as well as the adequacy of the level of funding. It must include proposals for possible necessary measures for the public finance plan, the state budget, and the social and health care national goals. The report must also take the expert assessments of THL into account (Section 30) and be published on a public website.

Funding of the counties

Section 3 (subsection 1) of the Act grants state funding to the counties. This state funding is a capitated formula that is among other things based on the number of county residents, population density and factors describing the need for services, foreign language, bilingualism, Sámi language, welfare and health promotion activities, and rescue risk factors as stipulated. Section 14 states that the need-coefficients of each county are calculated using need variables, based on (weigthed) disease and socio-economic factors as well as other task-specific weightings. These describe the need for and costs of services. Weighting factors are regulated based on THL research, at least once every four years. In addition, these weighting factors are regulated by the government by taking into account the macro-budgetary consequences. To sum up and according to Section 13, the definite calculated county resources are formed by adding together: 1) the income obtained by multiplying the basic prices of the services at stake, 2) county-specific service need coefficients (Section 14), and 3) the number of residents of the county.

Role of THL

THL offers support to the new wellbeing counties and has a growing and very significant role in the reform: evaluating the counties and the services they provide, guiding the data structure the counties need to report, giving information, supporting the MSAH, and defining the determinants of the funding formulas. Besides, THL also defines the information content and structures of the different monitoring reports. The knowledgebase on these issues needs to be improved. This is especially the case in the area of the social services and the cause of service needs. Many of these tasks need to be performed within the inherently political context of the reform. On the other hand, the technical expertise that THL needs to perform these statutory tasks relates more towards applied research, monitoring, and policy-oriented consultancies that are not naturally on par with the more academic nature of much of its current work in the area of public health. THL should take this into account with respect to its future capacity building. THL also needs to continue to support the municipalities with the functions they have in the health and social services domain, for example health promotion.

Data

THL is one of the four Finnish statistics authorities. In addition to official statistics, THL has a legal mandate and duty to decide on the content of social welfare and health data, classifications and terminologies and standardizations, as well as to collect and analyze different kinds of data and report results which are needed in meeting THL's other duties. Nevertheless, despite constrained resources, THL has increasingly developed its information and data activities in order to support local, regional and national authorities. However, due to considerable budget cuts a few years ago, the ability to further invest in ICT-capacity has been limited. This limits possibilities to further update and effectively develop data and knowledge activities in THL.

The data, registries and statistics which THL collects and publishes are defined in a number of separate laws. More than 20 acts and decrees mandate and define THL's roles in these activities. THL keeps altogether 34 registries and a growing share of this data is available via open access (e.g. data relevant in activities against the COVID-19 pandemic). An important principle is that all data should be registered only once and here substantial progress can still be reached. The same holds for improving the benefits for those who produce the information (for example the wellbeing services counties or the municipalities).

THL publishes numerous indicators (> 2000) on populations' welfare and health. In recent years, priority was given to publishing indicators which were relevant in the management of the COVID-19 crisis, but also production of data and information on the social and health care reform has had high priority (before the COVID-19 pandemic these were of highest priority). More information on social services as well as the causes of service needs are still recognized as challenges.

According to the publication calendar of THL, there will be about 70 different publications of registries and statistics in 2023. However, according to the published timetable, about 10 % of publications had original publication dates in 2022 and suffered from delays. THL has also other publication series such as reports, working papers, research briefs, policy briefs, guidelines and guides as well as books.

4. OBSERVATIONS and RECOMMENDATIONS

General observations

THL is an extraordinary institution for public health and welfare with strong research credentials. By its own wording, it seeks to be the most impactful public health institute in the world. The MSAH and THL, like other health ministries and public health institutes, were fully confronted with the challenge of leading the response to the SARS-CoV-2-pandemic (COVID-19). Finland managed to overcome the COVID-19 pandemic with substantially less severe cases and casualties than many other developed countries.

The panel did come across certain 'polarized' viewpoints among different stakeholders about handling COVID-19, but this partly seems natural considering the character and uncertainties of the crisis. Leading institutions had occasionally different public views on appropriate measures and were not always giving out consensus messages. This may have put a strain on mutual relationships and since it *takes-two-to-tango*, MSAH and THL may decide to invest more into their relationship and understandings of important issues such as their different roles and responsibilities. It is important and also one of the aims of this report to gauge how to solve organizational frictions that were revealed by (but are not necessarily unique) to the COVID-19 crisis. Such an endeavor starts with investing in better understanding each others role and position.

The international panel came across certain challenges where most stakeholders agreed. First, the reforms increase the need for policy-oriented support and work, including analyzing the overall performance of the service system (HSPA). This will affect the current balance of more independently initiated versus more policy-oriented research within the institute. Second, the institute needs to keep-up with the rapid developments in data sciences. Investments in and expertise on new forms of data analytics come to the fore at the expense of traditional methods of data collection. Third, due to possible inefficiencies of scope, THL seems to have reached the limits of its capacity to support an increasing amount of (non-core) government services. THL is profoundly a national public health –

and in the Finnish context also social welfare - institute. And, finally, on the longer horizon new public health and population welfare challenges and new frames of thinking lay ahead, such as planetary health.

Governance and independence

The size of Finland does not lend itself to create many different organizations in the health and social system arena as it is necessary to avoid inefficiencies of scale and scope. As a result, THL is tasked with a wide range of functions which is much larger than in many other public health institutes elsewhere - see detailed discussion below on the 'scope of services'. This wide range of responsibilities comes with important governance challenges for both THL and MSAH decisions makers. THL top management needs to oversee a wide range of, sometimes disparate, tasks and responsibilities that hinder THL working on its central priorities. Moreover, this breadth of activities is sometimes not well understood by some health stakeholders thus helping to create an unproductive image of THL. This perception came across in many of the interviews carried out by the panel - the institute is sometimes seen as *too big*, even *too powerful*, or *not very responsive* to practical day-to-day policy needs and priorities.

The causes of THL's perceived low responsiveness may also be attributed to two other factors. First, THL would benefit from providing more clarity as to its different functions, as well as the priorities and funding allocated to each one of them. In particular, it would be helpful to have a clearer distinction between the formal functions assigned by law such as epidemiological surveys; those given by the MSAH or other public authorities, sometimes ad-hoc; and those decided by THL management either covered by core funding or by competitive grants. Second, THL's priority setting process lacks some transparency as perceived by MSAH's actors and some outside stakeholders. This could be partially explained by insufficient governance and accountability arrangements between THL and public authorities, notably the MSAH; and external stakeholders. On the former, the MSAH's supervisory and monitoring functions are insufficient and, in all likelihood, need strengthening. On the latter, the current THL's advisory council is perceived as lacking in accountability by many external stakeholders.

One other area of contention is the MSAH rapid response requests to THL. This is an important service that THL performs in support of policy decision making. However, neither THL nor the MSAH seems to be fully contented with the current commissioning arrangements. For instance, there is a debate as to whether (and how many of) those requests should be part of the annual financial agreement or should be reimbursed separately.

On the other hand, the MSAH may be seen as *not very open to the many difficult tasks THL has to do with limited means; unclear in communicating its own priorities and not understanding THL's independence in pursuit of strategic priorities* for the public's health. Some interviewees have pointed to the fact that the MSAH sometimes comes across as working in silo's with lack of coordination and that its data-driven working practices may be improved. Fruitful principal-agent relationships require two to tango. That may not prevent those circumstances when issues bear an intensely political character, as it was often the case during the pandemic, that such embedded frictions become quickly apparent under what is in practice a two-stakeholder governance model. The panel felt that such *tensions* were often apparent during the interviews.

Many of the governance issues impinge on the question of THL's degree of independence and autonomy in decision making and priority setting. This issue was raised by many internal as well as external stakeholders interviewed. The legislation seems to grant THL a high degree of autonomy. THL excels in providing rigorous evidence to inform policy decision making in Finland and it is core to

its mandate to make this evidence available to all stakeholders and to the public in general. Health and social policy choices, however, need to also consider a wider range of factors beyond the evidence such as the tradeoffs with other important societal objectives, implementation considerations or indeed the prevalent values of elected policy makers. In that regard, beyond providing full and transparent data and evidence, should THL take an advocacy role in pursuit of particular health policy decisions? This fundamental question came to the full front during the COVID-19 pandemic in which THL at points put forward advice sometimes contradictory to that of the Ministry.

This panel contends that many of the governance issues faced by THL are rooted in issues of poor perception by many stakeholders as well as a lack of understanding of its functions, and can be addressed with more transparency and improved communication. However, most stakeholders could benefit from strengthening its governance arrangements and accountability lines. The panel proposes three main avenues, in particular to increase the effectiveness of the bilateral governance between THL and the MSAH, its main principal.

The first is to elucidate the degree of priority setting independence that THL should have from the MSAH. This panel argues that while full research autonomy and transparency of results should be ensured at all times, and should be protected by a dedicated budget, there is a need to assess THL's boundaries in advocating for particular policy making decisions. The MSAH should review the current legislation and arrangements and convene a working group led by the Ministry, involving THL and other stakeholders to look at more specifically on the pros and cons of various autonomy options considering the Finnish political and social context.

To solve budgetary issues, THL should clearly distinguish between formal responsibilities given by law, research projects undertaken by THL (commissioned by public bodies or on its own accord) and the services provided to the MSAH and to other ministries. In the same way, THL should provide a more transparent account of the current priority setting process. This would benefit the Institute itself and go some way towards addressing misconception and perception issues among external stakeholders. In sum, a fundamental streamlining of the current scope of the tasks and services may ease complex governance issues (see section below).

Second, the current governance and priority setting arrangements between the MSAH and THL need strengthening. The annual performance agreement (covenant) should clearly set out i) the scientific research funded by the MSAH; ii) the strategic evidence support services commissioned; and iii) the scope for rapid response services. Such tasks should be protected by a financial agreement and a dedicated budget to each one of them. This would add predictability and transparency to the work and priorities pursued by THL in supporting the Ministry. In addition, the MSAH and THL should agree on a set of future-oriented strategic tasks over the medium term. If THL gets new important tasks, such as supporting counties in implementing the reform, this agreement should also be clear about either de-prioritization of some other tasks or investing of additional resources.

Finally, external stakeholders could have a stronger *voice* in THL's priority setting and decision making. One option would be to transform the current advisory Council into a Board chaired by the MSAH and involving a range of stakeholders such as the new county councils, other ministries, universities and research funding bodies. A second option is strengthening of the current advisory Council. The panel sees this as a minimal precondition to better canalize the complex relations between THL and its stakeholders. The Council was newly formed in 2014 to foster relations with partners but has more potential than it currently fulfills. In practice, the DG of THL appoints the members of the Council. To fulfill a role in the strategic debate and guidance, the Council or the Board (both are not

to be recommended) should have a clear legal mandate as to how it oversees THL's strategic priorities and formally report on their progress. A fundamental streamlining of the current scope of the tasks and services may ease complex governance issues (see underneath).

Scope of services

While the law establishing THL in 2009 defines the purpose of THL as to promote health and welfare, prevent diseases and social problems, and to develop social welfare and health care activities and services, its duties have been expanded further with other laws and assignments. These include either organization, funding, management or also provision of specific health and social services, categorized as *government services* in THL.

This has resulted in THL being described by some as a 'department store': an organization that covers many different tasks and services that are not always synergistic and do not naturally complement each other.

This partly relates to the scale of the country. It is not always efficient to separate services between different institutions, while THL holds the span and capacity to host for a diversity of expertise. It is also understandable that from time to time, new challenges and tasks arise in the health and social sector, management of which is not appropriate at policy development level of the Ministry and an executive national agency is needed. THL has been such an agency for the MSAH and for other ministries. As an example of such tasks, THL is currently responsible for the purchasing and storage of medicines needed for the national vaccination program. Discussions are ongoing on the expansion of such responsibilities e.g. storing other medical goods and equipment needed for crises preparedness.

However, adding different 'government services' may pose some risks to THL's core functions. Although financial risks have been mitigated by the government services having their own designated budget lines, an ever increasing number of government services may, however, divert the focus of management and also the expectation of the MSAH from THL's main role of a research and development institute to the management of specific health and social services.

In other areas, THL is actively seeking additional project-based funding to carry out functions wherever applying for external funding from is possible. A higher share of dependence from competitive sources of external funding poses a challenge for strategic steering and ensuring that such applications are coherent with the mission of THL. This might create a perception (possibly unfounded) that some part of the organization is steered by available funding rather than by mutually agreed strategic priorities.

The panel considers that the establishment of welfare regions provides a good opportunity to undertake a review of the current 'government services', and to identify those which require more integration of health and social services and with less links to research. Once the regions are operational, devolving these services (excluding forensic medicine) to the responsibility of the regions is recommended, while maintaining oversight at the national level by monitoring the availability of services.

Research

Scientific competence, capacity, activities and funding are necessary for THL to be able to perform its tasks and reach its aims. THLs duties - as described in the law – require a sufficient number of highly competent and competitive researchers who can provide timely scientific evidence, risk assessments

and advice in crisis and during regular times, and who can communicate on these issues with the public, the government, and other political authorities at local, regional, national, and international level.

To recruit and retain such personnel and develop strong and efficient scientific groups at THL, it is necessary to be an active partner in scientific networks nationally and internationally and continue to be active in research. High quality is essential for relevance and usefulness in science, and a prerequisite for innovation, and for developing public health and welfare functions and institutions.

THL must perform its research in partnerships and networks nationally and internationally. External funding from research and innovation funding sources, such as the EU, should be part of the funding mechanism for research at THL. The Ministry (or THL assigned by the Ministry) should consider models for how independent, competitive, high quality, strategically significant research can be performed at THL in the future, and how funding from the core budget provided by the Ministry should be balanced against external funding.

Insufficient research quality and capacity represents a high risk for THL. It reduces the ability to produce and communicate trustworthy scientific evidence and advice, to recruite and retain necessary personnel, and to be able to invest in and develop THL and its functions for the society.

The panel emphasizes the need for describing models for research at THL in order to meet the challenges represented in the different viewpoints we have seen on what role research should have at THL in the future.

Based on the presentations and interviews, we have experienced that viewpoints differ on the importance of independently initiated academic research in the accomplishment of the goals of THL. Whereas some herald the research of THL as world-class and core business that should be strengthened even further, others are more skeptical and are questioning its relevance, especially for policymaking. During the last decade, some important research professors have left THL to continue their tasks at a university and, according to some, THL at the moment is not active enough in the different international research communities.

Some stakeholders seem critical of THL's role with respect to health and social policy relevant analytical work. This includes the handling of relevant data where, according to some respondents, other Nordic countries now seem to be in leading position. Benchmarking data are not always considered to be very relevant. To add value through the collection of data and information also implies (i) substantial knowledge about data analytic strategies and (ii) a deeply experienced level of expertise on the topics at hand, skills that do not always align with the career of the 'typical' academic researcher.

Research capacity and competitive grants are necessary for recruiting and maintaining competent personel and for maintaining and developing quality in performing tasks for the MSAH. The panel considers that THL holds all necessary assets to develop into a strong powerhouse of methodological expertise on policy relevant research such as real-world HTA, complex interventions, implementation research, organizational development research, AI research etc.

Data

There may be scope to increase efficiency of data production, if clear priorities are set and some rarely needed products are discontinued. This assessment cannot be undertaken by THL alone, but needs to take opinions of other relevant stakeholders and current legislations into account.

Findata that operates in connection with THL is a big provider of data. Health examination surveys are more expensive than interview surveys, which are more expensive than registries. Current registries, health examinations and surveys as well as the genome data are also of considerable value for analyses and assessment of effects of interventions in public health, health and social services, preparedness and response during crisis, and in society in general. THL seeks to optimize the use of such data. Data analytics could be further improved to increase such efficient use even further. As in many other countries, access to these data by other researchers and stakeholders could be systematically and transparently improved.

For performance assessment, steering and support of the counties, over 400 indicators (Kuva-indicators in which THL is one of the partners) are being produced in an open and easy-access web-application (www.sotekuva.fi). Some of the Kuva-indicators are updated annually (like indicators on population needs). However, a considerable share are updated overnight, like indicators on hospital or primary care utilization. Nevertheless, there are some gaps. First of all, data on utilization of social care services is not available at the same level as data on health services. Improvement in this area is necessary. Also, limited data are produced on quality, effectiveness and cost-effectiveness of services, though improvements of these are currently under way.

Clarification of the roles of the different stakeholders in the data-ecosystem would be helpful. THL is responsible for availability of data, however, in this task, it is dependent on how and when the data is provided. This has contributed to impressions that Findata is slow in processing applications for data. However, recently improvements are under way (www.findata.fi/tietoa-findatasta/vuosikatsaus-2022/) and current waiting period is reduced towards 3-4 months. Nevertheless, enabling others to make optimal and maximum use of data that are stored could be further improved. Incentives for providers, regions and other stakeholders in the system that provide raw data should be also reviewed.

Role in supporting the health and welfare reform

The pandemic illustrates the general dilemma regarding scientific research versus politics and policy: *speaking truth to power*. Most experts agree that these roles should not be mixed: research should inform, not prescribe what to do. However, in the real-world the differences between 1) *hard* scientific evidence, 2) other sources of evidence, 3) commonly held assumptions, and 4) political values and opinions are not always clear-cut. The Finnish reforms will not only ask for *hard* scientific evidence. The reforms will also ask for (many) other sources of evidence, knowledge and analysis.

In this complex reform, THL is a stakeholder with its own interest who has to provide for a range of functions. THL has already been providing 1) evidence for the need for reform, 2) promoting new models and solutions, and 3) has been involved in preparing the legal framework. Now, THL will fulfill activities such as evaluating and monitoring the reforms. Given a global budget, THL calculates the financial means for each region - based on per capita costs (risk-adjusted capitation). There seem to be few doubts about the legitimacy and correctness of the model. Politicians have to decide on the actual global budget and thus the available resources for the counties. In other words, many of the new tasks of THL are inherently politically sensitive, while on the scale of evidence by nature these tasks cannot reach the highest scientific spot, for example health and social system performance assessment.

The MSAH (together with the Ministry of Finance) will have annual meetings with individual counties on their accomplishment on the overarching goals of the reform. The counties monitor and evaluate their performance and progress, and that includes comparisons with their peers. What is monitored in practice will depend on THL's overseeing role with respect to the data and performance indicators. Since the MSAH relies on THL for an overview report on which it (partly) bases its own conclusions and policy-proposals, the institute fullfils a key role at the cross-roads of evidence and policymaking. When implementing the reform, political and societal contexts will be largely influenced by the writings and decisions that are being made within THL. The role of THL is politically sensitive as well as technically complicated. The real-world role of the new counties and what to expect is not yet entirely clear. Currently many stakeholders consider the county resources to be (too) limited.

The reform comes with fundamental questions that to a certain extent still need an answer. What are the (data) needs of the new counties? What are the most critical performance indicators and how should they be weighted (currently there are more than 300)? How to give adequate attention to social services and their performance as the integration of health and social needs is an important strategic goal of the reform? Is the current focus on data development sufficient to capture the social services? Most people the panel spoke to were leaning towards a *"no"* on this question. How to spread and disseminate best practices across the different counties? Answering such questions may bring up intense political issues and sensitivities. The panel already came across this during its interviews. For example, criticisms on a *habit* of THL to tell others how to run health systems and services; and expectations that THL should engage more closely with the leadership of the counties – for example through participation in the network of regional directors; regional leadership seeks to know what THL can do to support them more.

Keeping everything in mind, it is somewhat surprising that new statutory duties of THL in the reform did not come up in the interviews in a particularly significant way. However, the reforms will come with potentially new and additional roles for THL. The implementation of the reform has only just started and THL's role is not yet fully established. These pressures add to the already large span of activities THL must manage.

Counties may also seek for more consultancy related support. If THL is seen to have a role here, difficult questions come up with respect to a level-playing-field with private consultancy firms that may look for new areas of business in the counties. The expert panel is somewhat skeptical about such additional consultancy roles, since they may conflict with the public tasks of independent monitoring and evaluation of county performance. On the other hand, the MSAH and other stakeholders will seek for more applied and policy-oriented work and studies on the reforms. Such activities may challenge the current identity of THL, which is strongly built upon the classical concept of public health. The MSAH and THL may consider a covenant on such activities and its conditions. This should include the necessity to ensure that THL has sufficient resources and expertise for the new statutory tasks.

5. Conclusions

THL is a world-leading institution. It aims to keep this position, although it has digested strict budgetary policies and handles an increasing number of tasks that sometimes lack synergy. This position may become stretched, as several new challenges such as a major reform, the data sciences

evolution as well as issues of preparedness and health security need to be embedded in its structures. Capacities and expertise on these fields need to be prioritized and strengthened, while there is a limit to the spread of attention management can give to all its different tasks.

Thus, the international panel proposes a strategic redirection. First, current core tasks can be protected and supported by dedicated resources for a certain level of independently initiated research, including the necessary data. Second, the devolvement of non-core tasks, such as prison health services, shelters, state reform schools and several other services (excluding forensic services), to either another (new) agency with a focus on *funding or providing* individual services or towards the (largest) counties will increase efficiency. Third, the inherently political yet unseen consequences of the health and social services reforms need attention in the governance of THL. According to the majority of the panel, the MSAH can or should have a strengthened presence in the existing THL council or opt for the more farreaching model of a Board. It takes two to tango and to make the cooperation between the MSAH and THL a success both parties need to invest. A new type of covenant between both partners can further stipulate the policy relevant tasks of the institute (including funding).

The international panel thinks that such strategic repositioning of THL in the Finnish health and social care system and more specific elaborations and deliberations alongside the strategic directions of this report are necessary. As a result, THL, in its core areas, may gradually shift towards an even more knowledge-based organization and will secure its position to be a world-leading institution in its field.

APPENDEX I. SHORT BIOS OF THE AUDIT PANEL AND SENIOR EXPERTS

Panel members:

Maris Jesse (Co-Chair, Estonia) MD and MSc is Estonian health policy and health system expert, who most recently held the position of top civil servant responsible for health sector in the Estonian Ministry of Social Affairs and advisor to the Minister of Health and Labour. She has led the Estonian National Public Health Institute (National Institute for Health Development) as director and has also led the Estonian Health Insurance Fund. She has worked in the World Bank as senior health specialist and as consultant in many countries and programmes, advising on health policy, health system governance, health finance and public health, with a focus on alcohol control policy. Dr. Jesse served as Member of Executive Board of WHO 2009-2012. She holds medical degree from Tartu University, Estonia and a MSc from London School of Hygiene and Tropical Medicine and London School of Economics and Political Science.

Patrick Jeurissen (Co-Chair, Netherlands) Ph.D. is full professor in healthcare systems and finance at Radboud University Medical School in the Netherlands and holds a background as a senior policymaker. He is an expert on the design and implementation of strategic reforms and policies that specifically address issues of sustainability and affordability of health care systems. He has (co)-authored some one-hundred scientific publications and was a co-editor of two books on this subject; and is also a sought for speaker on (inter)national forums. Patrick represents the Dutch government at OECD and he was the chair of their working party on the patient reported indicator surveys (PaRiS). He also has been an advisor for EU, WHO, OECD, and different governments on issues of healthcare reform and fiscal sustainability. His major interests are strategic policymaking, health care finance and cost-containment policies, for-profit providers and payers, solidarity in health care systems, hospitals, and comparative health care system research. Currently his focus within these areas is on the efficient provision of tertiary care, multimorbidity and administrative costs. He holds a Ph.D. in health economics, his dissertation covers for-profit hospital ownership in the US, the UK, Germany, and the Netherlands, and holds an M.P.A., both from Erasmus University in Rotterdam.

Josep Figueras (Belgium) MD, MPH, PhD (econ), FFPH is the Director and cofounder of the European Observatory on Health Systems and Policies. In addition to WHO, he has served major multilateral agencies such as the European Commission or the World Bank and has worked as policy advisor in more than forty countries within the European region and beyond. He was Co-chair of the Scientific Advisory Board of the Monti Commission, and member of several governing, advisory and editorial boards including the governance board of the European Health Forum Gastein. He is an honorary fellow of the UK faculty of public health; received the Andrija Stampar Medal for excellence in Public Health and a Doctorate Honoris Causa from Semmelweis University; and he has three times been awarded the EHMA prize for best annual publication. He is currently a visiting professor at the London School of Economics and Maastricht University. He was director of the MSc in Health Services Management and lecturer at the London School of Hygiene & Tropical Medicine. Dr Figueras started his career as a specialist in Family and Community medicine in Spain.

Fernando Simon (Spain) MD, MSc in Epidemiology, trained in Spain, England and France, Fernando Simón is holding the post of Director of the Spanish Coordinating Centre for Health Alerts and Emergencies at the Ministry of Health since 2012 and coordinates the National Surveillance Network. He was researcher at the Spanish Instituto de Salud Carlos III between 2003 and 2011 and previously hold posts of responsibility in public health, epidemiology and research in several countries and international organisations in Africa, Latin America and Europe. He has experience in health crisis response coordination, public health surveillance, epidemiology, research, planning preparedness and control of infectious diseases and teaching in different settings at national and international level. Fernando Simón is member of several advisory groups, committees and scientific platforms for the EU Commission, the ECDC and WHO.

Camilla Stoltenberg (Norway) MD, is the Director-General of the Norwegian Institute of Public Health. She is a medical doctor and epidemiologist, and an adjunct professor at the University of Bergen. Stoltenberg has had and currently holds several positions in national and international boards and networks, mainly on research and public health. More specifically she has focused on developing research infrastructures such as biobanks, population cohorts, and health registries. Main topics in her research have been autism, ADHD, and other neurodevelopmental conditions. In 2017-2019 she chaired a governmental commission on the gender gap in education. Stoltenberg has had a key national role in the Norwegian response to the Covid-19 pandemic since early 2020. She has been particularly engaged in mobilizing and using research as an essential tool in crisis management, and in developing the communication about science, uncertainties, and disagreements during a pandemic.

Kai Leichsenring (Austria) is Executive Director at the European Centre for Social Welfare Policy and Research, Vienna. His background is in Political Sciences/Social Policy (Dr.phil., University of Vienna) and Organisational Development Consultancy. During his career as a researcher, he specialised in comparative and applied social research and policy consultancy with a focus on ageing, health and long-term care, and related issues such as governance and financing, quality management, labour conditions, user involvement and informal care. Apart from coordinating many national and European R&D projects he collaborated with a number of regional and national governments, and international agencies such as UNECE, OECD, WHO, World Bank, UNDP He designed and facilitated workshops, conferences and trainings, and published a wide range of reports, books and articles.

Tuija Kumpulainen (Finland) MD, graduated from the Medical School of Helsinki University in 1981 and specialized in general surgery in 1989. She also has a degree in health care management from Helsinki University. She worked as a surgeon till 1996. In 1997-2008 she held chief physician positions in Heinola and Kirkkonummi and in 2008-2016 in Espoo, one of the largest cities in Finland, being in charge of primary health care including senior services, rehabilitation, dental care and preventive care. Dr. Kumpulainen joined the Ministry of Social Affairs and Health 2017, acting in various positions (Medical Councellor, Director, Director General and Senior Adviser) before retiring in 2022. Her expertise covers the entire Finnish social and health care system, their legislation and development, including the COVID-19 management.

Ilkka Luoma (Finland) MD and specialist in general practice. Nowadays he is director of welbeing service county of Northern Ostrobothnia. During the years he has served as director of hospital district in Northern Ostrobothnia, CEO of social and health care organization Soite in Central Ostrobothnia, CEO of hospital district in Central Ostrobothnia and director of health services in Kokkola city. During his career he has been in many leading positions in different social and health care organizations. Later he has chaired and been a board member in different companies since 2018 (UNA Oy, Monetra Oy, Monetra Oulu Oy, Tervia Osaajat Oy, Työterveys Virta Oy) and vice-chairman in advisory board concerning state of emergencies (Ministry of Social Affairs and Health, Preparedness Unit).

Senior experts:

Jaakko Herrala (Finland) MD, Ph.D, eMBA is former director of Finnish health and social services reform at Pirkanmaa wellbeing services county. He has worked nearly twenty years as a doctor in primary health care centers and later as a respiratory specialist at Tampere University Hospital. Afterwards he served ten years' time as administrative medical director at Tampere University Hospital. He performed postdoctoral fellowship at Sydney University Hospital, Australia. Academic career included research and education work as respiratory care professor at Tampere University. During his management career, he has been involved in many national and international social and healthcare development, research, education, and reform works. He has been Finland's representative in the European Association of Hospital Managers, chairman of the board of the national Health and Finance Association and chairman of the board of the Finnish Lung Health Association (Filha). He has cooperated with the European Hope program, WHO office, as well as European Centre for Disease Prevention and Control (ECDC). A couple of years' time he was member of THL council.

Pekka Rissanen (Finland), PhD, is professor (emeritus) of health economics at the Tampere University and former deputy director general in the Finnish institute for health and welfare (THL). His main research areas are economic evaluation of health care, economics of care for the elderly and priorities in health care. His list of publications includes over two hundred articles and book chapters, most relevant of these published on international forums. He has participated in several national and international research and working groups. He acted as a member and vice chair in the Council for Choices in Health Care in Finland. Rissanen has been member of board in several Finnish scientific societies, chief editor of the Finnish Journal of Social Medicine (Sosiaalilääketieteellinen aikakauslehti) and chair in the Finnish society for health economics. He was visiting professor in health economics at Rennes 1 University, Faculty of Economics. In the THL he was responsible for developing and implementing the performance assessment system of the social and health care in municipalities and districts before the wellbeing services counties were established. In addition, he was responsible for development of data and knowledge activities in the THL.

APPENDEX II. BACKGROUND DOCUMENTS AND MATERIALS

Laws, reports, agreements and other articles:

Report of the International Evaluation of the National Institute for Health and Welfare. Reports and Memorandums of the Ministry of Social Affairs and Health 2014:23.

Evaluation of Finnish Institute for Health and Welfare (THL). Terms of Reference version 1.7.2022. Ministry of Social Affairs and Health, Finland.

Act on the National Institute for Health and Welfare (668/2008). Helsinki on 31 October 2008.

THL regulatory tasks and responsibly departments. THL/2255/0.00.00/2019, 1 January 2020.

THL performance agreement 2020–2023 and performance targets 2022. Ministry of Social Affairs and Health 2022.

THL internal rules of procedure (in Finnish). Finnish Institute for Health and Welfare 2022.

Council of THL. https://thl.fi/en/web/thlfi-en/about-us/about-thl/council-of-thl.

Finnish Institute for Health and Welfare (THL). Financial accounts 1 January – 31 December 2021.

State social and health care and forensic services under the responsibility of Finnish Institute for Health and Welfare (in Finnish). THL working paper 2/2021 by Merja Kovasin, Finnish Institute for Health and Welfare.

Interim report for COVID-19 pandemic in the units under the administrative authority of Finnish Institute for Health and Welfare. THL working paper 21/2022 by Merja Mikkola and Annamari Niskanen.

Research at THL. https://thl.fi/en/web/thlfi-en/research-and-development/research-at-thl.

FINGER - research project. Tiia Ngandu, Jenni Lehtisalo and Katri Hemiö. https://thl.fi/en/web/thlfi-en/research-and-development/research-and-projects/finger-research-project.

Reputation survey of Finnish Institute for Health and Welfare. Insights from stakeholders 2022.

Ministry of Social Affairs and Health administrative sector Media Barometer. Finnish Institute for Health and Welfare results. T-Media Ltd 2020.

Ministry of Social Affairs and Health administrative sector reputation survey general results (in Finnish). Aula Research 2021.

Ministry of Social Affairs and Health administrative sector THL reputation results (in Finnish). Aula Research 2021.

Presentations:

Overview of THL. Presentation by Finnish Institute for Health and Welfare 2022.

THL's view of its successful and challenging functions. Presentation by Markku Tervahauta. Finnish Institute for Health and Welfare 2023.

Development of the number of THL personnel between the years 2012-2021. Finnish Institute for Health and Welfare 2022.

THL personnel structure and financial picture 2022. Presentation by Finnish Institute for Health and Welfare 2022.

Presentation of Department of Health Security. Infectious disease control and vaccination unit. Finnish Institute for Health and Welfare 2023.

Government services. Presentation by Anneli Pouta et al. Finnish Institute for Health and Welfare 2022.

Public health and welfare. Includes Finnish experiences of Covid-19 pandemic. Presentation by Mika Salminen and Anu Muuri. Finnish Institute for Health and Welfare 2023.

Knowledge brokers. For meaningful information on the national social and health care. Presentation by Sirpa Soini, Finnish Institute for Health and Welfare 2022.

Research at the Finnish Institute for Health and Welfare. Presentation by Finnish Institute for Health and Welfare 2020.

Top 10 index – Scientific impact of publications in Finland. Presentation by Finnish Institute for Health and Welfare 2022.

Fingenious Ecosystem. Presentation 2023 and link https://site.fingenious.fi/en/.

Survey to high level directors of wellbeing services counties – main messages to Finnish Institute for Health and Welfare evaluation work. Presentation by Jaakko Herrala 2023.

Cultural, Behavioural and Media Insights Centre (CUBE). Intro. Presentation by Finnish Institute for Health and Welfare 2022.

Cultural, Behavioural and Media Insights Centre (CUBE). Strategic Action Plan. Finnish Institute for Health and Welfare 2022.

Finnish health and welfare success stories. Presentation by Finnish Institute for Health and Welfare 2023.

Kanta – Finland's digital health and social care treasure. Presentation by Anna Korpela, Juha Mykkänen and Pirjo Vuorikallas. Ministry of Social Affairs and Health, Finland 2022.

Digitalization of healthcare in Finland: History and current developments. Presentation by Vesa Jormanainen. Ministry of Social Affairs and Health, Finland 2023.

Secondary use of data. Presentation by Jukka Lähesmaa. Ministry of Social Affairs and Health, Finland 2022.

Finnish health and social services reform. Presentation by Ministry of Social Affairs and Health, Finland 2022.

APPENDEX III. TERMS OF REFERENCE

The task is based on the document presented by the Ministry of Social Affairs and Health to the international evaluation group on July 1, 2022.

The purpose of the audit

The audit will be future-oriented, reflect the challenges for development in health and wellbeing of the population, and make recommendations for the further development of THL's activities.

The purpose of the audit is linked to the balance of academic and policy-oriented work, cooperation with key stakeholders, and the overall resourcing of THL. The period of the audit covers the years 2019-2022 and the future perspective extends until 2026.

Main aim is to assess how THL succeeds in implementing its mission to promote the welfare, health and safety of the population, prevent diseases and social problems, and develop the welfare society, and how effective THL is in doing so.

- Does THL's work address the key issues in its field regarding its role as a national institute in the area?
- Are THL's objectives and results relevant in this respect and regarding cooperation between research institutes and universities?

Aim at giving future-oriented recommendations for the development of THL's activities, linked to the balance of academic and policy-oriented work, cooperation with key stakeholders, and overall resourcing.

New elements to be taken into account

THL has given and will give significant effort in support of the public healthcare, social welfare and rescue services reform and its implementation. These tasks lead to increasing expectations towards THL´s operational efficiency, data availability and quality.

THL is the national expert institution in the control of communicable diseases. The covid-19 pandemic has set THL under unprecedented focus and stress and has also brought into focus uncertainties in the legal position of THL as a national authority.

The impact of THL´s R&D outputs have been increasingly viewed in light of their policy relevance and ability to support evidence-informed decision making. Political decision-makers need rapid responses to actual problems whereas researchers need time to work in-depth on their topics.

Objectives of the evaluation

The audit should focus on the following issues, but the panel may choose to address also other topics relevant to the above-described scope of the audit. There are three sets of general objectives:

1. **Policy relevance**; relevance of THL to the needs of central government, the social and health systems and other key stakeholders, in light of the role of other organizations.
2. **Impact**; effectiveness of THL in meeting its set out mandate / goals.
3. **Governance;** effectiveness of the forms of internal and external governance.

Proposed audit questions are as follows:

- Have the policy relevance of THL's objectives and the results of THL been adequate and applicable in respect of the needs of stakeholders and THL's clients?

- Are the strategic goals of THL adequate and its legal position strong enough when compared to the work of respective institutes in selected reference countries?
- Does THL's work respond to its goals, with respect to the quality of information and methods of influencing and in view of the future needs of the key stakeholders?
- How adequate and efficient are the governance mechanisms exerted on THL by MSAH?
- Have the strategic goals and allocation of resources of THL been in accordance with its legal mandate and the relevant strategic national objectives set by the Government and MSAH?
- Are THL's processes and practices appropriate and innovative, of good quality and efficient?
- Is THL's role appropriate in relation to the other agents in the field and does THL make good use of partnerships?
- Are the knowledge and competence of THL and its personnel adequate and sufficient for the current and forthcoming needs?

APPENDEX IV. INTERVIEWS AND PRESENTATIONS TO INTERNATIONAL EVALUATION GROUP

Ministry of Social Affairs and Health (STM):

- Veli-Mikko Niemi, Permanent Secretary
- Pasi Pohjola, Director of Strategic Affairs
- Taneli Puumalainen, Director General
- Liisa-Maria Voipio-Pulkki, Chief Advisor
- Minna Saario, Director, Unit for Digitalization and knowledge management
- Jukka Lähesmaa, Senior Adviser, Unit for Digitalization and knowledge management
- Anna Sandberg, Senior Adviser, Unit for Digitalization and knowledge management
- Teemupekka Virtanen, Senior Adviser, Unit for Digitalization and knowledge management
- Riikka Vuokko, Senior Adviser, Unit for Digitalization and knowledge management

Finnish Institute for Health and Welfare (THL):

- Markku Tervahauta, Director General
- Elli Aaltonen, Professor of Practice, University of Tampere and Chairman of the Council
- Heikki Hiilamo, Research Professor
- Johanna Seppanen, Director of Findata, Social and Health Data Permit Authority
- Aleksi Yrttiaho, Technology and Risk Management Director
- Mika Salminen, Head of Department of Public Health and Welfare
- Anneli Pouta, Head of Department of Government Services
- Sirkka Goebeler, Chief Specialist, Forensic Medicine Unit
- Teemu Gunnar, Head of Unit, Forensic Chemistry
- Joonas Peltonen, Head of Unit, Special Services Unit
- Merja Mikkola, Development Manager

- Annamari Niskanen, Development Manager
- Marjo Avela, Team Leader, Forensic Chemistry
- Sirpa Soini, Head of Department of Knowledge Brokers
- Jarmo Kärki, Head of Unit of Information and guidance of information management
- Arto Vuori, Head of Unit of Data and Analytics
- Tiina Wahlfors, THL Biobank Director
- Anu Muuri, Director of the Department of Health and Social Care Systems

Other organizations:

- Aki Linden, Member of Parliament, Specialist Degree in Medicine, Master of Social Sciences
- Paula Eerola, President of the Academy of Finland
- Marina Erhola, Director of Pirkanmaa Wellbeing Services County
- Samuli Saarni, Docent at the Department of Clinical Medicine, Turku University
- Personnel representatives of THL: research professor Timo Sinervo, research professor Markus Perola, project coordinator Auli Toivola and development manager Sami Mustala.

APPENDEX V. COUNCIL OF THL

The task of the Council of THL is to promote the activities of the Institute, foster scientific research falling within the THL's remit and promote cooperation between THL and its stakeholders.

Council members

Chair

Elli Aaltonen, Professor of Practice, University of Tampere

Members

- Riitta Aejmelaeus, Budget Counsellor, Ministry of Finance
- Heli Backman, Director-General, Ministry of Social Affairs and Health (up to 31.12.2022)
- Tuija Brax, Director, Rule of Law Centre
- Essi Eerola, Process Manager, Bank of Finland
- Teija Felt, Labour Market Counsellor, Ministry of Economic Affairs and Employment
- Erja Heikkinen, Deputy Director General, Ministry of Education and Culture
- Minna Karhunen, CEO, Association of Finnish Municipalities
- Jouni Koski, President & CEO, Laurea University of Applied Sciences
- Sanna Lauslahti, General Manager, Pharma Industry Finland PIF
- Marina Lindgren, Director of Information Services, Social Insurance Institution of Finland
- Frank Martela, Philosopher, Aalto University
- Kati Myllymäki, Medical Specialist, SOSTE Finnish Federation for Social Affairs and Health
- Olli Naukkarinen, Manager, Wellbeing services county of Kanta-Häme
- Jussi Pihlajamäki, Dean, University of Eastern Finland UEF
- Juho Saari, Dean, Tampere University
- Kristiina Soots, Service Area Director, City of Järvenpää
- Markus Sovala, Director General, Statistics Finland
- Kari Tikkinen, Professor, University of Helsinki
- Kirsti Ylitalo-Katajisto, Director of Healthcare and Social Welfare, City of Oulu

The secretary of the Council is Development Manager Aki Tetri.

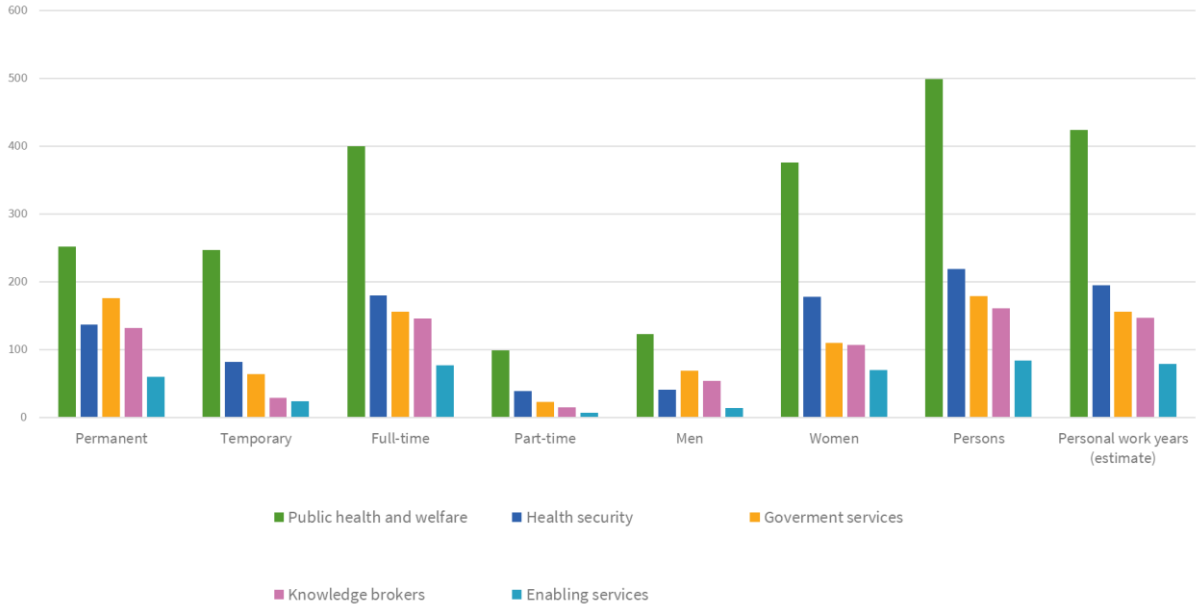
APPENDEX VI. TOTAL FUNDING OF THL 2016-2022 BY SOURCES OF REVENUE

Finnish institute for health and welfare, funding 2010-2022

(1 000 euro)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Budget funding, total	63 559	66 809	68 025	70 051	68 103	60 412	56 305	49 622	53 252	54 083	74 098	76 701	72 993	72 304	65 964	65 544	64 824
of which temporary covid funding											16 595	14 271	600				
transferred funding from the previous year	3 002	5 724	6 566	6 361	6 546	10 070	6 848	8 106	7 804	10 839	7 519	15 298	20 407				
Co-financed activities (revenues)	31 107	34 174	31 597	32 781	33 729	45 168	34 255	39 782	41 935	43 026	31 268	38 664					
Chargeable services (revenues)	8 401	7 626	6 232	6 700	6 399	6 372	7 898	9 023	9 869	9 866	9 673	8 945					
Total funding incl. transferred funding from the previous year	106 069	114 333	112 420	115 893	114 777	122 022	105 306	106 533	112 860	117 814	122 558	139 608	93 400				
Co-financed activities, share of Ministry of Social Affairs and Health	8 506	11 004	12 437	16 023	19 917	32 487	16 226	22 053	22 000	25 894	11 750	22 606					

Source: THL, 2022, status 15.12.2022

APPENDEX VII. PERSONNEL OF THL BY TYPE OF EMPLOYMENT AND BY DEPARTMENT (15.12 2022)



APPENDEX VIII. REVENUE OF THL BY DEPARTMENT AND SOURCE OF REVENUE,(15.12.2022)