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## FOR THE READER

Welfare services are undergoing a reform. The central objective of the reform is to improve the opportunities of citizens to look after matters related to their own life and health independently and, where necessary, supported by professionals. Reliable information on well-being and online services play a key role in this.

The social welfare and health care service must be client-centred. The services must be effective and equally accessible to everyone. A precondition for this is that the exchange of information and multiprofessional cooperation between different actors in the social welfare and health care sector is functional, safe and based on the patient's preferences.

Citizen's mobility and increasing freedom of choice also require cross-border exchange of information and closer EU level cooperation in information management. Better utilisation of information also plays a key part in research and innovation activities. To this end, it is necessary to develop legislation and interoperability, both nationally and internationally.

Electronic information management provides up-to-date information and modern tools for citizens and

professionals as well as offering support for management in tasks related to assessment and decision-making.

In active cooperation with citizens, social welfare and health care organisations and different ministries as well as the Association of Finnish Local and Regional Authorities, the Ministry for Social Affairs and Health has produced a strategy for information management in the social welfare and health care sector. Strategy implementation will also be planned and carried out jointly. The implementation plan focusing on the next few years will be completed in early 2015, and it will be maintained throughout the strategy period. Some of the measures are launched immediately, others later on. The strategy will be implemented by several different actors.

The strategy for information management supports a socially sustainable society set out in the Strategy for Social and Health Policy where people are treated equally, everyone has the opportunity to participate, and everyone's health and functional capacity is supported. A central idea is to put information related to social welfare and health care services into effective use to support well-being and the services to be renewed.

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## **SUMMARY**

The objective of the strategy is to support the renewal of the social welfare and health care sector and the active role of citizens in maintaining their own well-being by improving information management and increasing the provision of online services. To achieve these ends, it is essential to make active use of information related to social welfare and health care services and to refine it into knowledge that will support both the service system and individual citizens.

The strategy has been completed in broad cooperation with different stakeholders. Among others, the following strategies have been accounted for when preparing this strategy: the Socially Sustainable Finland strategy, the Public Sector ICT strategy, intelligent technology strategy , big data as well as the health sectors growth and genome strategies. The implementation of the strategy will be coordinated with the afore-mentioned strategies.

The active role of citizens in life management and self-management will be increased by producing reliable information on well-being and services that will facilitate the utilisation of this information. Information on the availability and quality of the services will be made openly available. Citizens will have access to online services, and they can generate information either for their own use or for the use of professionals. eHealth and eSocial solutions will be used to ensure that people living in sparsely populated areas and special groups will also have equal access to the services.

Professionals in the social welfare and health care sector will have access to information systems and electronic

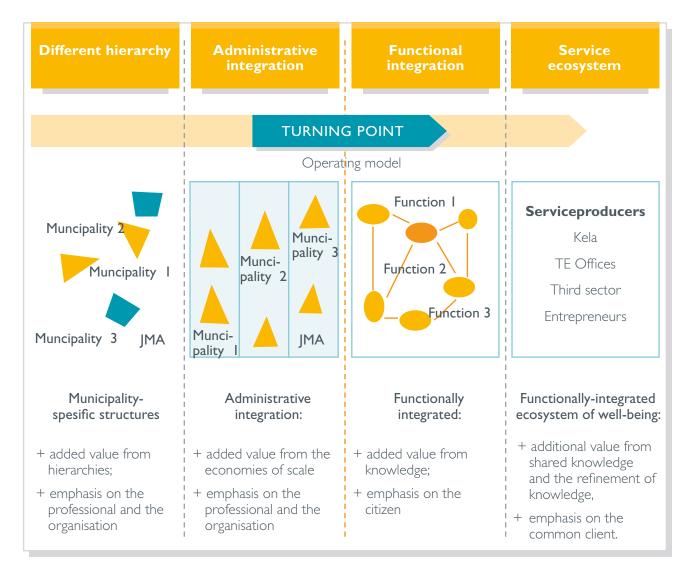
applications that support their work and its processes. It will also be essential that they know how to use these systems, and are motivated to use them.

The impact and effectiveness of the service system will be increased through information management solutions. The availability of information related to social welfare and health care services across sectoral boundaries will be secured by means of national solutions while also accounting for the demands of data protection. Physical services requiring a great deal of staff and facilities will be replaced by lighter online services in situations where the online services are appropriate. This will alter the traditional roles of citizens and professionals and also change relationships between professionals, thus enabling the rational organisation of work.

Data produced by citizens social welfare and health care services will offer input for the management of services and decision-making in society in real time as well as for research, innovation and industrial and commercial activity in the sector.

Clear cooperative structures will be created for the steering of social welfare and health care services both nationally and regionally. Social welfare and health care services will produce data that is consistent at the national level, and the information systems will be regionally unified and nationally interoperable. New online services will be developed and purchased through cooperative procedures utilising the national service architecture and the principle of modularity.

## PHASES OF SERVICE SYSTEM DEVELOPEMENT



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# TOWARDS SOCIAL WELFARE AND HEALTH CARE SERVICES OF THE FUTURE

The strategy work in the area of information management is based on a broader strategy for social and health policy titled "Socially Sustainable Finland 2020". A socially sustainable society treats all its members fairly, reinforces participation and a sense of community, supports health and functional capacity, and provides the security and services required by its members. Promoting the health and well-being of the population, preventing diseases and supporting the life management, work ability, functional capacity and independence of individuals are the core tasks of social and health policy, and solutions in the area of information management have an increasingly important role in their fulfilment.

Social and health policy is closely associated with economic development. The share of social expenditure in GDP is significant. The difficult economic development of the last few years, the sustainability deficit and the growing service needs of the future form an equation that we cannot solve without structural reforms and the adoption of new operating models in the organisation and production of services. The objective of the changes is to slow down the growth in expenditure and to produce the services using a service structure that is much more effective than today.

The most significant reform to take place in the next few years concerns the organisation of social and health care services. The strategy supports the reform of social welfare and health care services and its following key objectives: promoting the health, well-being and social safety of the population, ensuring equal access to social welfare and health care services in all parts of the country, enhancing primary social welfare and health care services, and implementing a cost-effective, high-impact service structure.

The responsibility for the provision of the services will shift from municipalities to five joint municipal authorities (social welfare and health care regions). In the reform, social welfare and health care services will be integrated within the same organisation from the basic level all the way to demanding special services. Instead of an organisation-centred, fragmented service culture, the emphasis will be on the client's needs and freedom of choice as the main premise of service provision.

The necessary requirement for the implementation of the reform is that information management can be harnessed to support the new structures and operating methods. Information on the quality, transparency, effectiveness and costs of the service providers' activities that is compatible with the agreed-upon indicators will be readily available. This information will be a central tool for steering and help citizens to choose between producers of social welfare and health care services, and the providers of the services to guide and select service producers.

Even though the functional capacity and health of the population have improved, differences in welfare between population groups and regional differences have remained significant. In order to achieve greater equality between citizens and to narrow differences in the area of health and well-being, the foundation of knowledge that decisions in the area of social policy are based upon must be even firmer than before. The wider accessibility of information will be supported by the stability of the Finnish society and the citizens' trust in the authorities. Openness of information is a basic requirement of civil society and democratic decision-making.

## DEVELOPMENT OF INFORMATION MANAGE-MENT IN SOCIAL WELFARE AND HEALTH CARE

## From paper to bits

The history of information management in Finnish health care is long. The work towards the digitalisation of health care began in the 1980s, and in the mid-2000s only electronic medical health records were in use by public health care. In the social welfare sector, this work began later, but today electronic systems are widely in use, although not quite as comprehensively as in health care.

#### **Standardisation**

Standards for the contents of electronic medical records have been developed since the 1990s, and technical data transfer standards since the 2000s. The objective has been to identify IT standards in health care that are the most wide-spread internationally. Active efforts have been made to standardise the content and technology of information management in the social welfare sector since the mid-2000s.

### Regional development

Public health care has developed the regional availability of patient information since the early 2000s. As the exchange of information has not been comprehensive in the public sector either, and it has not included the private sector, the solution was notas useful as it should be. The information must be accessible to the patients and clients themselves as well as to professionals, both nationally and EU-wide.

#### **National Kanta services**

The Kanta services include ePrescription, My Kanta Pages and the Patient Data Repository. Patient information

created by health care service producers is transferred to the national patient data repository. The information can be accessed by citizens via the My Kanta Pages service. They are also, upon the patient's consent, accessible to private and public producers of health services treating the patient. Similar development efforts and legislation are currently under preparation in the social welfare sector.

#### Finland as an international forerunner

Thanks to the work described above, Finland, together with the other Nordic countries, has repeatedly found itself near the top of international comparisons produced, among others, by the EU, OECD and ITIF. In 2013, the European Health Telematics Association (EHTEL) conducted an evaluation of the national Kanta services in the field of health care and concluded that Finland is an international model country for eHealth.

#### Information into effective use

This strategy shifts the emphasis of development work from collecting and transferring data to ways of utilising it in the promotion of personal well-being and life management, in work with patients and clients, and in management and research in the social welfare and health care sector. This means the analysis and interpretation of information found in different data resources and its refinement into knowledge. It is essential that the information is transparent, compatible and comparable and that it is up-do-date and easily available.



# CITIZENS AS SERVICE USERS

The offering and selection of online services varies significantly between different service producers. Citizens experience the offering of online services as narrow and expect new services. Finnish people use the Internet for a wide variety of purposes, and the citizens possess good basic capabilities in terms of both IT skills and attitudes for also adopting internet and mobile-based services in the area of social welfare and health care services. In addition to online services for citizens, we must develop new tools for preventive action and tools people can use to look after their own health and well-being.

## Strategic objectives by 2020

Citizens use online services and produce data for their own use and for the professionals. Citizens are able to use the online services of the service providers no matter where they live. Information produced and maintained by the citizens themselves is utilised in the planning and implementation of treatment and services to the extent permitted by the citizen.

Reliable information on well-being and services supporting its utilisation are available and assist citizens in life management and in promoting their own well-being or that of their family and friends. Online self-management services and information management associated with them may support the prevention of health problems, self-assessment of the need for services and independent coping.

Information on the quality and availability of services is available in all parts of Finland and can be used in the selection of the service provider. Reliable and comparable information on different alternatives and service providers increases freedom of choice.

## **Measures**

A platform for managing the citizens' personal information in the areas of health and well-being A platform for managing citizens' personal information on health and well-being intended for the use of citizens and professionals will be implemented. The implementation

will utilise the Kanta services and open interfaces.

Citizens themselves will make the decisions regarding the storing of their information on the platform and its disclosure using the applications to be built on the platform.

## ICT-SOLUTIONS SUPPORT THE RENEWAL OF SERVICES.

Primary health

care

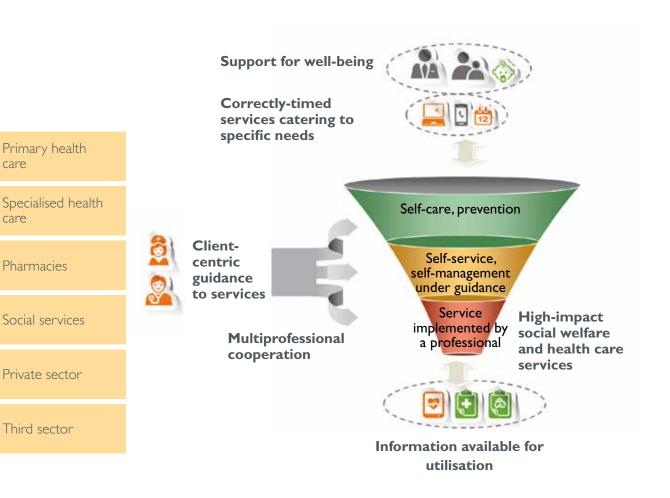
care

Pharmacies

Social services

Private sector

Third sector



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## Implementation of self-management and online services

The social welfare and health care regions will work together to build essential self-management and other online services on the national platform. Self-management services will include clinical decision-making support for the use of citizens, risk tests, self-assessment methods as concerns the need for assistance required in referral to treatment, online health checks and reminder and calendar solutions to support self-management. Out of online services, particular emphasis will be placed on solutions for the making of appointments, applying for benefits or services, tracking the processing of a customer case and secure communications. The services will be available on national, regional and local service channels.

The implementation will utilise solutions developed in the SADe programme aiming to develop new electronic services in public management.

Responsibility for coordination: social welfare and health care regions jointly and internally

## Development, adoption and evaluation of online services producing well-being and health benefits

A programme will be launched with the aim of helping innovative solutions and developing a national system for the evaluation of applications, mobile solutions, and measuring technologies that support self-management and the prevention of welfare problems and their impacts.

Responsibility for coordination: national

### Client-specific plan

A multiprofessional general plan common to all operators and utilised nationally will be produced for clients who are frequent users of the services. Possible organisation and sector-specific plans will be incorporated into this plan. The overall plan will enable the management of the services in use by the client both individually and as a whole, the monitoring of plan implementation, and the linking of the plan to the systems used by the service producers.

Responsibility for coordination: national

## Supporting the client's freedom of choice

The information base listing all the available services will be developed further so that citizens will be able to perform consistent comparisons between service producers in social welfare and health care. Information offered as open data will include: the availability of a service (queue and appointment information), service selection, quality (e.g. hospital-acquired infections), effectiveness, price, location and feedback.

## PROFESSIONALS — SMART SYSTEMS FOR CAPABLE USERS

Professionals in the social welfare and health care sector are working in a constantly changing environment. With these changes, their work will become increasingly multiprofessional and interactive, and the clients more active. Information systems and information management will hold a central role in supporting the transition.

Changing the operating model of professionals from traditional "bedside care" towards the coaching of citizens and the utilisation of online services will require active guidance. Within organisations, leadership and supervisors will play a key role in mainstreaming new ways of doing things in the everyday practices of professionals.

Finland has been a forerunner in the use of information systems in social welfare and health care. The flip side of this progressiveness is that many of the information systems are already relatively old. The level of support provided by the information systems for the work processes of professionals varies. Systematic national level monitoring of the usability of patient data systems from the viewpoint of professionals first began in the 2000s,

and ensuring usability still constitutes an important development target.

Education and training in the area of information management has been implemented in rather a diverse manner in educational institutions, universities and other organisations providing education. The number of research and teaching posts established in the field in universities and polytechnics is limited. In this respect, the current situation is not satisfactory. Furthermore, there is a constant need for continuing education. Adopters of national Kanta services are supported by online training, by offering training in the use of the operating models, and with other support material.

## Strategic objectives by 2020

Professionals in social welfare and health care have access to information systems that support their work and its operating processes.

The usability of systems and tools is improved and the decision support and process management provide

better support for professionals in their work, which contributes to the quality and effectiveness of the work as well as the experience of the professionals regarding the meaningfulness of their work.



## Electronic applications in the use of professionals

Professionals in social welfare and health care sector are involved both in the procurement of the systems and in the planning of operating models. The professionals' competence in information management is strengthened, and effective workplace training is provided for

the adoption of new applications as concerns both the information systems and the operating models used. Training in information management, data protection, information security and information systems has been incorporated in the basic, further and continuing education and workplace training of professionals in social welfare and health care.

#### Measures

## National criteria for the usability of information systems

National criteria will be prepared for the usability of information systems, and descriptions of best practices for the evaluation of the usability will be drawn up. The criteria must be accounted for in the procurement of patient and client information systems. Usability surveys will continue to be conducted on a regular basis, and their targeting at professional groups in social welfare and health care will be increasingly comprehensive. Summaries, views and tools based on job descriptions and the needs of users and clients will be created for the use of professionals.

Responsibility for coordination: national

## **Decision-making support for professionals**

Clinical decision-making support for the needs of health care professionals will be implemented as a national solution. This will ensure that decision-making is based on information obtained from the Kanta service and patient information systems that is as comprehensive and as up-to-date as possible. Systems supporting decision-making in social welfare will be developed that utilise national data resources, such as the National Income Register:

#### Responsibility for coordination: national

## Training of professionals

Training in information management, entering data, data protection, information security and knowledge management will be increased in basic education and training and in-service training in the social welfare and health care sector.

Responsibility for coordination: national

# Active user involvement in the development and adoption of information systems and operating models

Cooperation with users will be enhanced in the development and renewal of patient and client information systems. The aim is for the new service system to be able to cater for the needs of its users in a more effective manner. Professionals will be offered training in the use of the information systems and new operating models in a systematic manner.

Responsibility for coordination: social welfare and health care regions jointly and internally

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## SERVICE SYSTEM — EFFECTIVE UTILISATION OF LIMITED RESOURCES

Electronic solutions and operating models play a key role in reaching the operational goals of the social welfare and health care service reform. The goal is transitioning to integrated social welfare and health care services that are based on the needs of the client and equally and accessibly available. When operating models are reformed and cooperation is multiprofessional, staff resources can be utilised in a rational manner.

The service system must also utilise information management and online services to train citizens to manage their affairs better or, for example, to cope better with the treatment of a chronic illness.

Citizens must be understood as partners of the service providers who are actively interested in the management of their own affairs and should be included in designing new types of services. The changing roles of a citizen and a professional will enable a more rational division of labour. For example, citizens may enter data on themselves and their situation for the professionals, make or reschedule an appointment, or opt to use an online service instead of a physical visit.

The service system must offer online services, so that the personnel resources thus freed up can be used to serve better those clients who require more care and attention.

## Strategic objectives by 2020

## Client and patient information is accessible to professionals and clients irrespective of changes in organisation structures, services and information systems.

The accessibility of information related to social welfare and health care services across sectoral boundaries is secured via national solutions while also accounting for the demands of data protection.

Information management solutions increase the effectiveness and impact of the service system. The changing roles of citizens and professionals allow for a rational sharing of duties. With the help of electronic solutions, physical services requiring appropriate facilities and a large number of staff are replaced by lighter online services where appropriate.

# The availability and accessibility of the services is being improved through electronic solutions.

Online services are used to secure the equal offering of services in sparsely populated areas and for special groups.

#### Measures

## Legislation on the use of information related to social welfare and health care services

Uniform legislation will be drafted to guide the processing of information related to social welfare and health care services.

The legislation will be reformed so that it will support the joint access to information required by the integration of social welfare and health care services and the service combinations offered to clients. Provisions on the controllers of data files will be reformed in connection with the social welfare and health care service reform. The information needs of supervision will also be accounted for in the reform.

Responsibility for coordination: national

## Information resource solution for social welfare implemented as part of Kanta services

The national information resource solution of social welfare will be implemented as part of Kanta services. This will ensure functional exchange of information concerning people who are clients of both social welfare and health care. Thanks to the national client and patient information resources (Kanta), the information can cross organisational and sectoral boundaries and also be utilised in the production of national and regional statistics.

Responsibility for coordination: national

#### Kanta services in health care

Kanta services in the health care sector (electronic prescriptions, patient data repository, information management service for patients) will be adopted in all public health care organisations and in private health care organisations required by legislation.

## Responsibility for coordination: social welfare and health care regions jointly and internally

The information contents and functionalities of Kanta services will be expanded gradually to include data on imaging and oral health care and the new contents of the information management service. The integration of social welfare and health care services will ensure that the data resources of health care and social welfare are in joint use.



## Development and use of online services

The development of online services will be carried out in cooperation with the central government and the social welfare and health care regions. The central government will invest in joint implementation and national-level solutions, whereas the social welfare and health care regions, private service providers and suppliers will invest in the services to be attached to them.

Electronic solutions enabling the production of social welfare and health care services using new, client-oriented methods will be broadly adopted in service production. Accessibility of online services will be ensured via national level criteria.

Responsibility for coordination: social welfare and health care regions jointly and internally

Online services will also be developed for administrative back office processes (e.g. management of customer payments and payment ceiling, cross-sectoral delivery of certificates and statements).

Responsibility for coordination: national

## Support for processes and operations

Systems intended for the internal steering of the activities and work flows of the service producers will be developed and procured. The systems will increase the effectiveness of the work of professionals and the management of service production. Systems will be developed for the needs of service producers and service providers for the purpose of monitoring the ways in which a combination of services or an individual service used by a patient or a client is managed and for keeping track of the implementation of the service plan.

Responsibility for coordination: social welfare and health care regions jointly and internally

# REFINEMENT OF INFORMATION AND KNOWLEDGE MANAGEMENT – KNOWLEDGE-BASED MANAGEMENT

Preconditions for the management and development of the social welfare and health care system are that the availability, quality and cost-effectiveness of the services are assessed in a systematic manner and that management and social decision-making associated with it are based on up-to-date and comparable data that is regionally, nationally and internationally accessible.

With the help of reliable and easily accessible information, it will be possible to better anticipate the population's state of health and need for welfare services, and the development of the service network and the services can be adjusted to the changing needs and new opportunities in the area of service production.

## Strategic objectives by 2020

## Data sets support the management of service production and decision-making in society in real time

The openness of information and the right to information strengthen democracy and civil society. Information collected and produced in civil services is made available free of charge and in an updated form. In situations where there are no grounds for the non-disclosure of information, the data is made available without compromising the protection of personal data.

Client or patient-specific data generated in social welfare and health care services, information on the availability, quality and effectiveness of services, information produced by the citizens themselves and information generated in other sectors is available, and it is utilised in a secure manner to benefit service production, society and residents at various locations.

## Data sets support research, innovation and industrial and commercial activities

Social welfare and health care data can be utilised for R&D activities in a legally and ethically sustainable manner.

#### Measures

# Legislation on secondary uses (unrelated to care or client relationship) of social welfare and health care data

The reform of the legislation on personal data files is intended to ensure that the social welfare and health care data stored in national and regional data files can also be used for secondary purposes, such as the individual targeting of services, research, knowledge management and special purpose registries. The reform is coordinated with the implementation of the EU regulation on data protection. The comprehensive reform of statutes concerning the processing of personal data in the social welfare and health care sector is taken into account in the reform

## Responsibility for coordination: national

## Development and resourcing of secondary use of data

National and regional objectives will be set for the collection and utilisation of information on the activities of the social welfare and health care sector, and a national plan will be produced in accordance with the implementation of the new social welfare and health care service structure and its operational requirements. The collection and analysis of the data will be adjusted to match the need for social welfare and health care services as well as the requirements related to the availability, productisation, monitoring and development of the services. Classifications and indicators describing social welfare and health care services (content and use of services as well as their availability, service processes, quality, effectiveness and impact) will be harmonised and developed with the help of information architecture.

#### Responsibility for coordination: national

Population-level statistical and indicator services will be developed further to render them compatible with national data resources. The principles applied in the design work will be single-instance storage and anonymised utilisation of data for any purpose outside of the original. The analysis of collected data will be developed and the collection of data will be rationalised and reduced. Unrestricted information on social welfare and health care services (such as information on the services, quality indicators, statistical data and information on the availability of the services) will be made available as open data.

## Responsibility for coordination: national

Resourcing (e.g. ensuring competence, ethics) of the secondary utilisation of data will be strengthened.

### Responsibility for coordination: national

A common infrastructure will be created for secondary use of the data, such as research, management, the production of statistics and commercial use. The infrastructure will include joint services intended for a variety of purposes (e.g. the selection of a group a patients for a study, anonymisation) and utilise national data resources on social welfare and health care services (e.g. Kanta; Kansa, a self-management solution for citizens; biobanks and other data files).



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## STEERING AND COOPERATION IN INFORMATION MANAGEMENT – FROM SOLOISTS TO HARMONY

The objective of cooperation and steering related to information management and data system solutions is to support the goals and measures of the national social and health policy and the structural reform of social welfare and health care services. National and regional cooperation must be strong and the guidance provided must be clear and effective in order to ensure the availability of the information required for providing and producing social welfare and health care services and the interoperability of the information system solutions. The development and utilisation of information management solutions serving clients and professionals are based on effective cooperation and guidance. It is necessary to intensify cooperationboth nationally and regionally as well as between social welfare and health care.

## Strategic objectives by 2020

The structures for steering and cooperation in the area of information management are clear and support the social welfare and health care service reform

Steering and cooperation are used to ensure that effective operating models and solutions supporting them are widely disseminated and utilised.

#### Measures

# Steering and leadership of information management in social welfare and health care services

The steering and organisation of information management and the production of joint solutions in this area will be clarified as part of the reform of social welfare and health care services. Operating methods and funding for interregional cooperation will be arranged on a permanent basis. Intra-regional cooperation will be steered based on regional architecture forming part of the enterprice architecture of social and health care sector as defined by the Ministry of Social Affairs and Health. The local and regional architecture will be defined jointly by organisations in the social welfare and health care sector.

Responsibility for coordination: national

# A model for cooperation between social welfare and health care regions and national operators

A model will be established for the coordination of national cooperation between social welfare and health care regions and municipalities in the area of information management and their strategic cooperation with the Ministry of Social Affairs and Health. As part of the cooperation model, common procedures will be adopted between the central government and the providers of social welfare and health care services for preparing and making decisions on national solutions in information management, their funding and their adoption methods.

## INFOSTRUCTURE — ENSURING A SOLID FOUNDATION

Infostructure includes ICT services, platforms, and standards and definitions regarding both content and technology that support the dissemination of information and interoperability. Strategic objectives associated with the activation of citizens, increasing the effectiveness of the service system, and the secondary use of information require that IT solutions are built on an open and scalable platform using jointly agreed-upon operating methods. The entity must be modular, open and developed in a controlled manner, and it must allow for the renewal of services, structures and technological solutions. This also requires a cooperative and networking method of developing solutions that encourages experimentation with different types of solutions and compiling evidence of solutions that produce the desired effect. Solutions that have proved effective will be effectively mainstreamed in broad-based use, and new services and products will be developed based on them.

## Strategic objectives

## Interoperable and modular architecture

Structured information will be consistent at the national level, and national definitions of information architecture. will be in use by the sector as a whole. Open interfaces and international standards will enable interoperability. A national service architecture will be used in the development of social welfare and health care services. Efforts will be made to harmonise information system solutions in social welfare and health care regions based on a jointly agreed-upon architecture. Information systems for the social welfare and health care sector will be designed and implemented in a modular fashion, so that, utilising expertise available on the market, information system services can be developed, procured and adjusted to the changing needs of the sector. An entity consisting of interoperable systems allows for an open development path and effective competitive tendering processes that are based on user needs.

## Information security i.e. the accessibility, integrity and protection of data

will be ensured in all national and regional information system solutions

#### Sufficient data connections will be ensured.

## Cooperation in development and procurement

New solutions will be developed through close and broad-based cooperation between users and suppliers. National dissemination of new solutions will be ensured.

Procurement procedures used will befit the goods and services to be purchased and be carried out in close cooperation between buyers and suppliers.

#### Measures

## Adoption of enterprise architecture

Nationally uniform information will be expanded to cover new entities as indicated by user needs and taking into account international development.

New online social welfare and health care services will be implemented as part of the national service architecture, using a service on behalf of someone else as one example. A national identification solution created by the Ministry of Finance will be utilised in the national PKI solution for the social welfare sector. Mobile identification will be used in social welfare and health care services. Some of the new national solutions will be implemented as cloud-based applications.

#### Responsibility for coordination: national

The national specifications of information architecture for the social welfare and health care sector will be used systematically in the development and procurement of information systems.

The specifications of information system architecture will be based on comprehensive planning in the social welfare and health care regions and the harmonisation of key common information system services.

Responsibility for coordination: social welfare and health care regions jointly and internally

## Development of standards and support for their use and dissemination

Systematic use of open and standard-based interfaces and the possession of the necessary competence in targets for which they are available.

## Responsibility for coordination: social welfare and health care regions jointly and internally

An organisation will be established that in cooperation with social welfare and health care service producers, system suppliers, standardisation organisations and national operators will standardise and implement work to promote interoperability, recognise the needs for common interfaces, test and verify interfaces, and monitor international standards and adjust them for the needs of service production, services directed to citizens and industry in the sector.

Responsibility for coordination: national

## **Ensuring information security and data** protection

Becoming part of the national services will require the auditing and certification of both the information system and the service provider associated with it.

The service producers and service providers must make sure that their operations and the information systems used by them are compliant with provisions on data protection and information security.

Responsibility for coordination: social welfare and health care regions jointly and internally

## Improving data connections of professionals and citizens

Adequate and reliable data transfer will be ensured for both citizens and social welfare and health care organisations, also in remote areas. A common mobile broadband solution for the authorities will be implemented in cooperation between the State Security Networks and other authorities (in particular, prehospital care and emergency social services).

Responsibility for coordination: national

## Cooperation in development and procurements

The regions will work in close mutual and internal cooperation in the utilisation of information systems and in the arrangement of services. Efforts will be made to ensure that information systems within regions are

linked in a purposeful manner.

The development of new services will be promoted, particularly in the regional and national ecosystems of service producers, users and solution developers, where a functional path exists from needs to development work and experiments and on to the adoption and mainstreaming of solutions.

Purchases related to new operating models and technologies will be carried out in accordance with the principles of innovative and pre-commercial procurement through active cooperation between buyers, suppliers and users. Ready-made products will be obtained through joint procurements, which offer advantages in terms of pricing and expertise in the handling of the procurement process. Procurements, client cooperation and activities by national actors will be used to promote the emergence of alternatives and competition.

Responsibility for coordination: social welfare and health care regions jointly and internally

## VISUAL SUMMARY

## **Opportunities**

Service innovation
Holistic health and well-being
Prevention
Personalisation and
segmentation of services
Genetics
Big data
Open data
Cross-sectoral cooperation
Evidence on effectiveness

#### **Enablers**

Steering and legislation
Comprehensive planning
Open interfaces and standards
Mobile technology
Service-oriented architecture
Cloud services
Ecosystems for development
Security and data protection

Focus on people
Inclusion,
individualised
services and well-being

Smart tools for professionals
Usability, summaries, decision
support and process
management

Adaptable processes, support for high-quality work and services

Technology that supports personal well-being and the system of services Refinement of information, knowledge-based progress and management

Quality and availability of services, new operating models, competence, steering and cooperation

Data repositories: national social and health information, personal health records, high-quality data

Reliable and scalable information infrastructure for service production and development



# Photo: Tuulikki Holopainen

## IMPLEMENTATION OF THE STRATEGY

After the adoption of the strategy, an implementation plan will be produced in cooperation with the implementation of the social welfare and health reform and stakeholders. At this stage, responsibilities for the measures will be assigned and a schedule will be produced for their implementation, and indicators for monitoring the implementation will be established. Priority will be given to measures essential for the social welfare and health care services reform. Parties responsible for the

implementation will also prepare an implementation plan and obtain the necessary funding in cooperation with the appointed parties. Almost all measures will require broad cooperation between different actors. The Advisory Board for Information management in Social and Health Care will supervise and evaluate strategy implementation. Regular follow-up reports will be published on strategy implementation.

## **WORK PROCESS**

The eHealth and eSocial Strategy 2020 has been created through active cooperation with stakeholders. Material has also been shared and ideas have been

Working groups: Approximately 50 people have taken part in the five working groups: professionals from the social welfare and health care sector and from the field of information management, management from municipalities and hospital districts, representatives of the

generated through the social media. Since autumn 2013, four seminars have been held and two extensive online surveys have been conducted on the process.

Ministry of Social Affairs and Health, the Social Insurance Institution, the National Institute for Health and Welfare, NGOs in the social welfare and health care sector, trade unions and representatives of scientific associations.

## Management group for the development of the strategy:

Annakaisa livari, Ministry of Social Affairs and Health, Chair
Anne Kallio, Ministry of Social Affairs and Health, Secretary General
Teemupekka Virtanen, Ministry of Social Affairs and Health
Jari Porrasmaa, Ministry of Social Affairs and Health
Pentti Itkonen, South Karelia Social and Health Care District
Sinikka Salo, City of Oulu
Olli-Pekka Rissanen, Ministry of Finance
Juha Mykkänen, University of Eastern Finland
Vesa Jormanainen, National Institute for Health and Welfare
Tanja Rantanen, Association of Finnish Local and Regional Authorities
Karri Vainio, Association of Finnish Local and Regional Authorities
Minna Saario, Association of Finnish Local and Regional Authorities
Maritta Korhonen, Kuopio University Hospital

## Advisory Board for Electronic Information Management in Social and Health Care has served as the steering group for the strategy:

Päivi Sillanaukee, Ministry of Social Affairs and Health, Chair Kirsi Varhila, Ministry of Social Affairs and Health, Vice Chair Timo Valli, Ministry of Finance Mikael Forss, the Social Insurance Institution Päivi Hämäläinen. National Institute for Health and Welfare Mika Salminen, National Institute for Health and Welfare Marja-Liisa Partanen, National Supervisory Authority for Welfare and Health Arto Ylipartanen, Office of the Data Protection Ombudsman Tuula Haatainen, Association of Finnish Local and Regional Authorities Pauli Kuosmanen, City of Kuopio Sinikka Salo, City of Oulu Markku Mäkijärvi, Hospital District of Helsinki and Uusimaa Antti Jokela, Pirkanmaa Hospital District Pirkko Kortekangas, Hospital District of Southwest Finland Markku Suokas, Association of Finnish Private Healthcare Providers (LPY) Marjo Rönkä, Association of Entrepreneurs in the Field of Social and Health Care (TESO ry) Sirpa Peura, the Association of Finnish Pharmacies Anna Simonsen, Folkhälsan

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# INFORMATION TO SUPPORT WELL-BEING AND SERVICE RENEWAL

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