

HEALTH FOR ALL

VISION FOR A SUSTAINABLE HEALTHCARE

Preface

We have a good public health service in Denmark. Not only do we provide a high standard of care – the Danish health service provides free and equal access for all.

Over the past decade, the Regions have focused on increasing the efficiency and quality of hospital care. This has resulted in a high degree of specialisation, good quality and increased productivity. Together with national initiatives, we have achieved great improvements for patients, which shows in lower mortality rates and higher efficiency. Waiting times have decreased significantly. Now, we are in the process of building new hospitals, which will improve efficiency and patients' experience of care further.

This is a huge achievement. Everyone involved should be proud. It is an achievement, which has improved the Danish health service and thereby benefited every single Danish citizen. The positive results we have seen so far, and the ongoing work of making the health care system more efficient, are things we must continue to pursue.

However, if we are to meet the future challenges, it is not sufficient to continue along the same path. Denmark faces demographic challenges. More and more people suffer from chronic illness, and many suffer from multiple chronic illnesses. This puts a tremendous strain on the health service and in the future, we will need to put a significant investment in specialised treatment. If we are to ease this pressure, we need to change the way we work. At the same time, continuity of care remains the biggest Achilles heel in health care.

“HEALTH FOR ALL” is Danish Regions' proposal for a new direction for healthcare in Denmark. It is a question of creating a health service, which is sustainable on an economic, organisational and professional level.

We need to see the challenges we face in healthcare in a wider context. We must continue to improve the

treatment and care. At the same time, we need to focus more on preventing illness and the deterioration of illness. We need to become much better at focusing on specific groups at risk of developing illness. We need to gather knowledge and assess patients' needs and wishes. Moreover, we need to target prevention and treatment.

It requires a shift in focus from hospital treatment to the whole of healthcare. We need to look at how patients' entire course of treatment can be more continuous. Furthermore, we need to look at how we, as part of a joined partnership between hospitals, general practice, municipalities and private stakeholders, can provide the highest possible level of health for the money invested.

For the Regions, it means that we need to see ourselves as more than owners of the hospitals. We, as the Regions, must contribute to bring stakeholders together in partnerships that have the common goal of providing the best prevention, care, rehabilitation and treatment at the lowest cost, with patients' needs as the overriding priority.

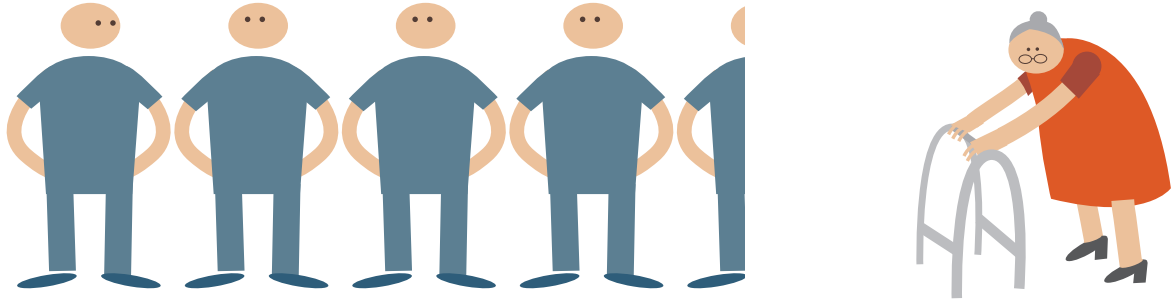
We will work to ensure that, throughout the healthcare system, we move away from incentives, which solely serve to optimise each sector's productivity or profits. We need incentives and ways of working together that promotes health in the population and efficiency.

This publication represents a paradigm shift in healthcare, which will require that staff throughout the health service work together to provide the best level of health in the population in return for the money invested. With this publication, Danish Regions invites all relevant parties to participate in creating a sustainable healthcare .

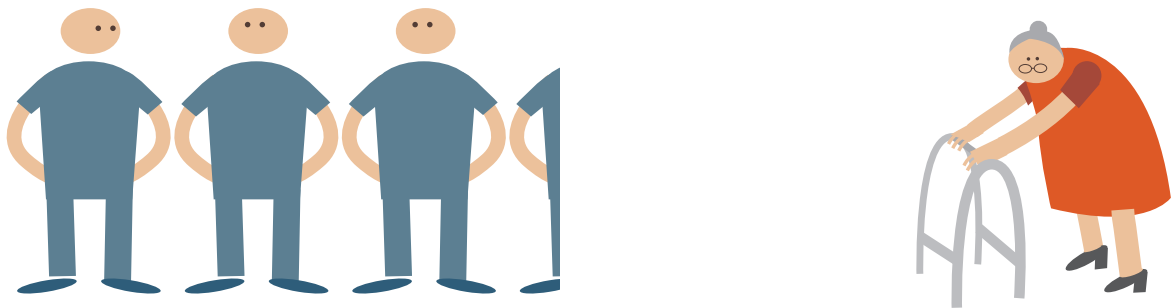
Enjoy!

Bent Hansen and Jens Stenbæk

2000 4.3 PERSONS BETWEEN THE AGE OF 18 AND 64 PER PERSON AGED 65 OR MORE



2016 3.2 PERSONS BETWEEN THE AGE OF 18 AND 64 PER PERSON AGED 65 OR MORE



2026 2.8 PERSONS BETWEEN THE AGE OF 18 AND 64 PER PERSON AGED 65 OR MORE



2036 2.3 PERSONS BETWEEN THE AGE OF 18 AND 64 PER PERSON AGED 65 OR MORE



Source: Based on numbers from "Fem megatrends der udfordrer fremtidens sundhedsvæsen". Højgaard & Kjellberg. KORA (2017).

Sustainable healthcare

The Regions will work to ensure that we continue to have a sustainable healthcare

We are at the beginning of a period in which demographic changes will put enormous pressure on the public sector. In the future, there will be less in the working age population. There will be a great shortage of labour. The development of new treatment therapies and technologies and higher expectations from the patients will contribute to ensure higher quality of care, but at the same time, it will put pressure on our resources.

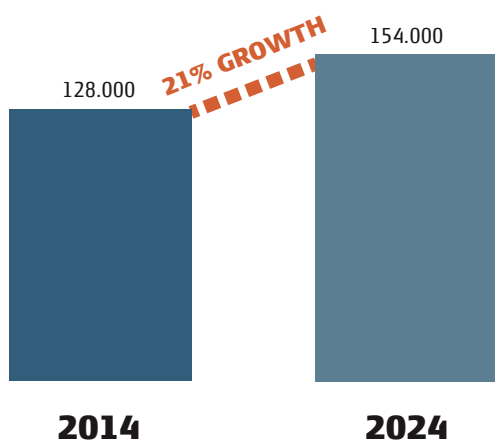
People live longer and therefore often require healthcare services over a longer period. Diagnosis and treatment of an increasing number of patients with chronic illnesses requires significant resources. In particular, patients suffering from multiple chronic illnesses will make up a larger and larger section of the population.

Patients today are well informed and place high demands on the accessibility of healthcare services. They expect solutions that fit into their everyday lives and continuity of care across sectors.

Continuity of care is one of the biggest challenges in our healthcare system today. The challenge is not new. Through the last decades, different initiatives have been established to enhance continuity of care. Nonetheless, this issue remains a challenge for the Danish health service.

NUMBER OF PEOPLE SUFFERING FROM MORE THAN ONE CHRONIC ILLNESS

Projected growth



PEOPLE SUFFERING FROM MULTIPLE CHRONIC ILLNESSES ARE EXPENSIVE:

HEALTH CARE COSTS ARE **11X BIGGER**

for patients with 3 or more chronic illnesses compared to a patient who is not suffering from chronic illness

THE RATE FOR READMISSION **5-12X BIGGER**

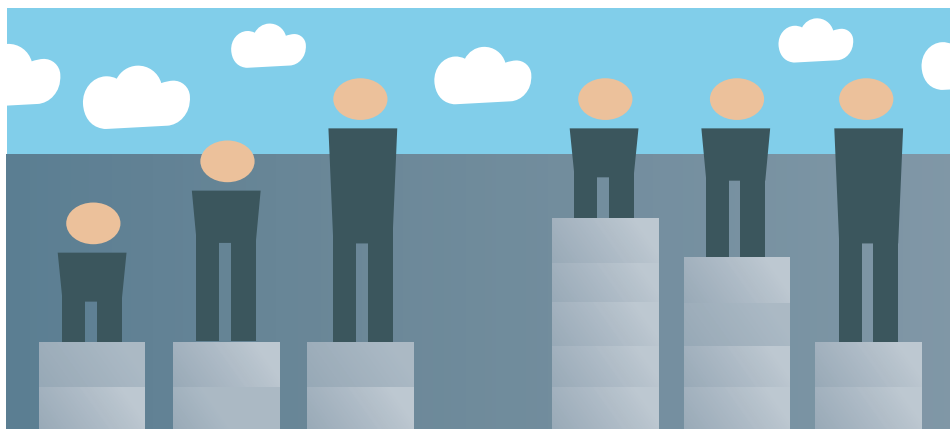
for patients with 2 and 3 or more chronic illnesses compared to patients who are not suffering from chronic illness

Source: Based on numbers from "Fem megatrends der udfordrer fremtidens sundhedsvæsen". Højgaard & Kjellberg. KORA (2017).

Many well-informed patients are keen to help themselves – for example with the help of technology, which eliminates the need to see the doctor in person. The use of technology asks for a new organisation of healthcare and a greater focus on which services that can be provided closer to the everyday life of patients.

In the coming years, the possibilities to collect and use data will grow exponentially. The challenge will be to use data appropriately in order to make improvements in healthcare. At the same time, IT and data will transform healthcare, including the way we organise healthcare, the skills needed by healthcare professionals, and the way they work.

Demands and expectations from patients, new technology and digital solutions and the massive challenges facing the healthcare system, confirm that we need to challenge the traditional thinking in healthcare. We need to explore new approaches and rethink organisation, coordination and leadership in the healthcare system in Denmark. The goal is to create an integrated health service that meets patients' needs and expectations.



Health for all

The Regions will focus on the population's health

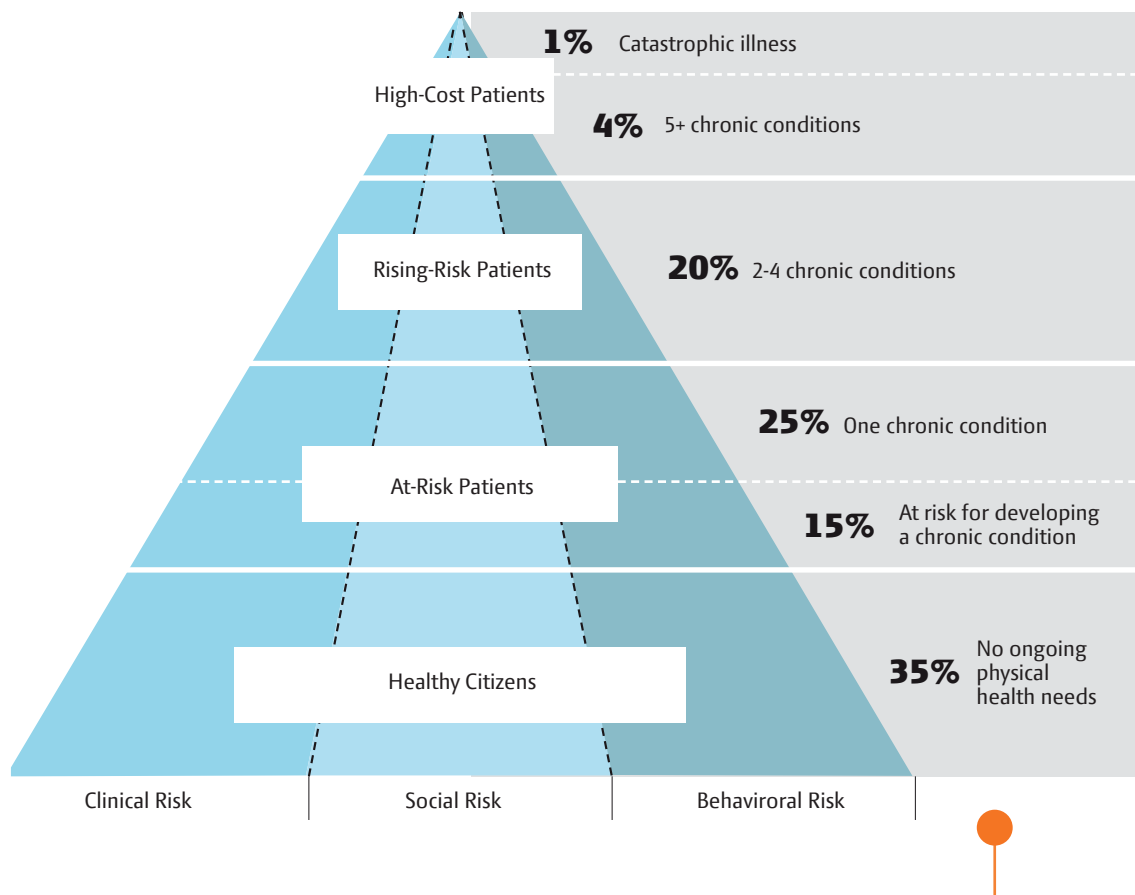
Easy and equal access to care is a founding principle of the Danish health service. We all have an equal right to receive a high standard of care, and we all have the right to rapid diagnosis, treatment and rehabilitation.

In the future, we cannot afford to focus solely on illness and only provide treatment when the need arises. We have to focus on keeping the population as healthy as possible. We need to focus more on health interventions that can prevent illness and hospitalisation. This will require joined effort across the entire healthcare system.

The goal of an integrated healthcare system is to ensure the highest possible level of health in the population. Health for all means that everyone should have an equal opportunity to achieve good health. The means to achieve good health will not be the same for everyone. It will depend on the individual's needs and situation. In the planning of care, the individual's situation and needs should always be taken into consideration.

Focusing on ensuring the best possible health among the population is one way to meet the challenges the Danish healthcare system faces. Changes in the way we work across the healthcare system, the way we organise the care we provide and the way we evaluate and manage healthcare need to be made.

The Regions cannot achieve the objective of health for all alone. Instead, it will require collaboration across the health service, including patients and stakeholders outside the health service.



Population health management

“Population health management” is trending internationally. The aim is to achieve the best possible level of health in a given population and the most even distribution of health across the population by personalising healthcare to the individual’s needs and situation. Stratifying the population in to different groups defined by their risk of developing illness or suffering a deterioration of an existing illness is a key tool within population health management. Risk stratification requires data about the health of the population.

There may be various reasons why a patient is at risk of developing illness or suffering a deterioration of an existing illness. A patient with diabetes and heart disease has a higher risk of suffering additional health problems. A person who has a low

degree of health literacy or who does not have the resources to contact the healthcare system is at an increased risk of becoming ill. Someone who suffers from substance abuse has less opportunity to actively take care of his or her health and treat his or her illness, thereby increasing his or her risk of becoming more seriously ill.

The population-based approach shifts focus from only treating disease to also focusing on health and risks of becoming ill. At the same time, this approach will allow us to personalise care to the individual patient based on the patient’s risk of experiencing a deterioration of his or her health.

The figure is from “Prioritizing Population Health Interventions”, The Advisory Board Company.

Integrated healthcare

The regions will work to ensure that the organisation of healthcare leads to higher value for patient and society

There are many stakeholders in the Danish healthcare system, and each has a responsibility to provide healthcare to the Danish citizens. A key challenge for our healthcare system is that patients often need care from multiple stakeholders. This can lead to a lack of continuity in care due to inadequate communication, which potentially has consequences for the health of the patient and creates an inefficient use of resources.

All parts of the healthcare system are dependent on each other. We need to see the healthcare system as one system and work together to achieve the best possible health status for the population. Care must be delivered where it brings most value to the patient, the population and the society.

There is a need to try out new ways of cooperation and collaboration across sectors. At the same time, we need to develop a structural framework and incentives that contribute to support collaboration and continuity of care across settings.

This chapter addresses how we can ensure the best organisation of care and how we can work as an integrated healthcare system with the aim of ensuring the best possible health status in the population.



The Regions will take responsibility for ensuring the best possible organisation of care

The Regions have a responsibility to ensure that care is organised in a way that brings the most value for the patient and for society. We are committed to this responsibility.

Traditions and common boundaries should not decide the organisation of care. Instead organisation must be based on the value it brings to patients and society. We must rethink and develop sustainable solutions throughout the healthcare system. In addition, we must dare to experiment with the way we finance and organise shared care.

This may lead to changes in the care organisation. There may be care carried out at the hospital that are more cost-efficient in general practice or in the municipalities. There may be care that hospital and municipality should carry out together with joint financing and management. There may be specific tasks that other professions, such as general practitioners or by private actors, should carry out. Furthermore, there may be care that patients themselves can carry out with the help of technology and digital solutions.

Re-organisation of cardiac rehabilitation

One region reorganised cardiac rehabilitation and moved most of the rehabilitation from hospital to the municipalities. The hospital continues to have the medical responsibility, but for most patients, non-medical rehabilitation will take place in the municipality. In this way, hospitals and municipalities work closely together to carry out the rehabilitation of cardiac patients. The region monitors the quality of the rehabilitation, with hospitals continually providing data to the Danish Cardiac Rehabilitation Database, and municipalities providing data to a local database.

After the re-organisation of the cardiac rehabilitation, more patients follow the rehabilitation program. This prevents relapses and admissions. At the same time, the re-organisation is less costly and frees up resources for care of others.

This example illustrates how, with an open-minded approach to the organisation of healthcare, it is possible to provide more health for the scarce resources.

“Psykiatriens hus” – integrated psychiatric centres

In the recent years, multiple integrated psychiatric centres have been established in Denmark. The centres are a joint initiative between region and municipality, where professionals work together and treatment is carried out under the

same roof. Both region and the municipality fund treatment and staff. This serves to promote greater continuity and cooperation. At the same time, a more holistic approach serves to reduce hospital admissions and readmissions.

The Regions want to collaborate with all stakeholders in the healthcare system to prevent illness and deterioration of illness. This relates to municipalities, general practitioners, private practitioners, private hospitals and clinics as well as voluntary organisations and patient associations. Collaboration may take form as formal partnerships or local alliances with inspiration from other countries.

Population health management – International experiences

A number of places around the world is working with population health management. In the US, Spain, Germany and Scotland health services are working with new forms of organisation and co-operation, with a focus on ensuring the highest possible level of health for the population. Hospitals and primary sector are working together to ensure the best care for patients and good health in their communities by working proactively and personalising care by the use of data, shared IT systems and joint financing. Furthermore, there are good examples of healthcare partnering up with players outside of the healthcare system.

In Spain, a region is contracting with a private organisation to provide healthcare to citizens in selected parts of the region. The organisation in question has their own hospitals and health centres. In addition the organization is working in partnership with local schools and local media in order to prevent illness. The organisation pursues the most effective use of resources to ensure the best possible outcomes across the popula-

tion. Hospitals and general practice are working together towards ensuring that the care they provide to patients is provided for the lowest cost that still ensures adequate healthcare, via a policy of avoiding hospital admissions through early intervention in general practice. The hospitals have an obligation to support general practice and general practice have direct access to guidance from hospitals. Healthcare professionals at the hospitals and general practice are able to communicate via a shared IT system about the mutual patients for whom they provide care.

The region pays the organisation a fixed amount of money per registered citizen without this entailing a requirement for activity. Instead they place demands on quality and performance of care. The region has for instance set out requirements for waiting times and immunisation rates. In this way the organisation is given an incentive to ensure a high level of health among the population and to work to minimise hospital admissions.

It is crucial that the organisation of healthcare constantly develops in order to meet the needs of the patients and society. It is a matter of designing innovative models for collaboration, including collaboration with other sectors than the healthcare sector, as for example the social sector, education and employment.

Collaboration between regions and municipalities on employment and health

With the introduction of a new reform of early retirement pension and flexi-jobs in 2013, a new collaboration model was established between the municipalities and the regions. As part of the municipalities' process of clarifying citizens need for early retirement or flexi-jobs, the region provides medical guidance. The regions support the municipalities by identifying and handling healthcare issues. Healthcare initiatives takes place par-

allel with employment and social initiatives. This provides the person and the municipality with one access to health care.

An evaluation of the model shows that the model is a success. The individuals, the municipalities and the regions are satisfied with the model, which in addition saves the municipalities money.



The Regions will work to ensure that the planning of healthcare interventions is based on knowledge and data

Data and knowledge about the population is a prerequisite for providing the best and most appropriate care for the individual and for achieving the goal of health for all.

Knowledge about the health status of the population is useful for stratifying and identifying groups of people who, for various reasons, are at risk of developing a given illness or experience a deterioration of health. Population groups identified can be middle-aged working people, unhealthy middle-aged people, active elderly, frail elderly, young people who engage in risky behaviour, socially vulnerable people and young people who are unhappy, etc.

Healthcare should, to a higher degree, be planned and organised based on each group's risk of disease and the cause of the risks, rather than on diagnosis.

“The Health Profile” – a source of knowledge about the population

Every fourth year, the regions perform health profiles, which are an important source of knowledge about the Danish population's health and health behaviour. A large, representative sample of the population completes a questionnaire. The health profile helps to highlight health issues and groups at particular risk of developing illness. The regions use the information in the planning of healthcare interventions. For instance, the health

profile indicates that Danish citizens' assessment of their own health varies depending on their social circumstances. With other words, being uneducated and without work puts you at an increased risk of disease. In this way, the health profile provides knowledge that makes it possible to carry out targeted interventions with respect to various groups of the population.

Knowledge of the population's risk of experiencing a deterioration in health is of relevance in the meeting between healthcare professionals and the patient. Information concerning patients' health can help healthcare professionals to individualise the care to the patient's needs and situation. Individualised treatment can prevent further illness and hospital admissions.

The possibilities to access and share data across different health care settings are limited. The limited access can lead to adverse events, lack of information and an experience of uncoordinated care for the patient. It is important we work to ensure secure data sharing across the healthcare system for the benefit of patients and a better use of resources.

Data can be utilised to personalise care to patients' needs

A Spanish healthcare organisation uses population data to personalise care to the individual needs of patients. The patient record includes information about the patient's risk of experiencing deterioration. The doctor can use the information to personalise the care to the patient's situation. Patients who are ill and at high risk of experiencing a deterioration has a specific nurse who regularly checks up with them to see

how they are doing. Patients who are ill but at a low risk of experiencing a deterioration of their health, and who are able to treat their symptoms themselves, have access to a health portal with information about symptoms and guidance to a healthy lifestyle. This allows the organisation to focus their resources while ensuring the best possible health and the most even distribution of health in their population.

Furthermore, the potential to collect and use patient and population reported data via apps and questionnaires in the treatment and planning of healthcare is not used fully. High standards of data security, which intends to prevent improper use of data, are necessary to ensure better data sharing.



The Regions will work to improve cross-sectoral collaboration

Since 2007, the regions, the municipalities and general practice have formalised collaboration in health agreements. The Danish Health Authority develops clinical guidelines and disease management programmes to ensure quality of care and coordinated care.

We spend extensive resources to develop and implement these health agreements, clinical guidelines and disease management programmes. However, the obligation to carry them out are missing and the gap between clinical ideals and the real world varies depending on local conditions.

For this reason, we need to consider how we can strengthen collaboration between sectors and how the formal framework can support a more binding collaboration. The health agreements should continue to be a political agreement that sets the direction of cross-sectoral collaboration. However, we should increase the use of local agreements in the development and implementation of interventions. Collaboration with private practitioners, other private healthcare professionals and private hospitals and clinics is also important.

The best way to organise health care will depend on local conditions; but the objective should always be the same: to ensure the highest level of health among the population. We must promote and enable local patient-centred initiatives. For this reason, we want to test and develop new forms of management and financing models.

Value for patients and society

The Regions will prioritise healthcare interventions that brings the most value for the patient, the population and society

A sustainable healthcare requires prioritisation of healthcare resources. We need to optimise the use of resources in order to avoid waste. The resources invested in healthcare is an investment that will ensure a healthy population and an evolving society.

We have to prioritise resources to areas that provide the best overall value for the patient, the population and the society. In order for this to happen, it is necessary that incentives are contributing to promote a proactive and coherent provision of care.

At the same time, the way we assess quality of care must serve to promote the highest level of health in the population relative to the money invested. The national goals for quality introduced with the new national quality programme in 2016 are the framework for this work.

This chapter addresses how we can ensure a better use of resources by the way we manage and assess the health service.



The Regions believe that a change from activity-based management to value-based management is necessary in order to achieve better value for money in healthcare provision

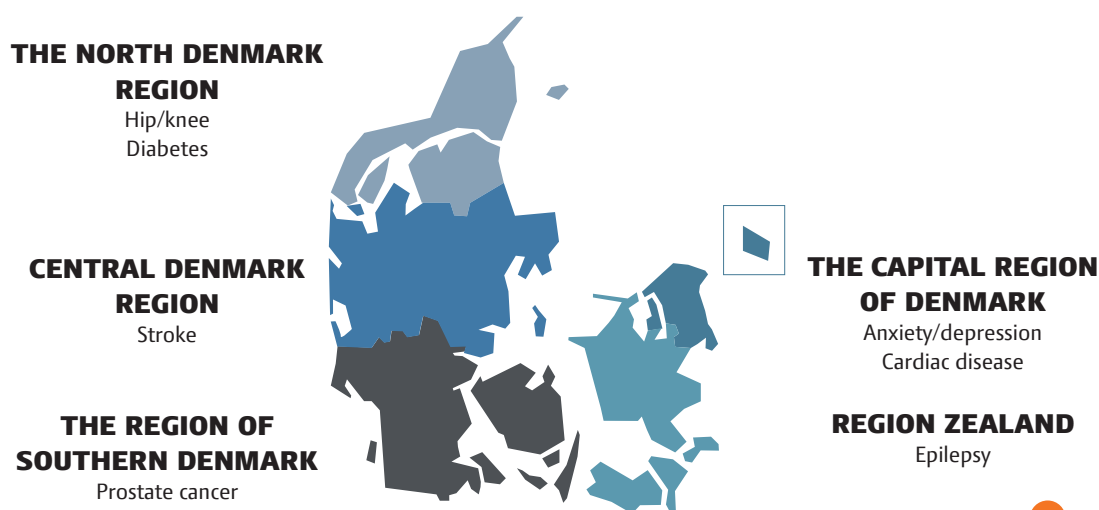
At present, hospitals are assessed based on their activity level – as for the services they produce. This focus on activity has helped to increase productivity in hospitals. This has resulted in short waiting times and reduced length of stay. However, a focus on activity does not necessarily ensure quality of care or a focus on the outcomes that matter for the patient.

At the same time, the focus on activity does not create incentives to collaborate and ensure coordination of care, since it generates an incentive to focus on the department's activity budget. Nor does the focus on activity support the transfer of care out of hospitals into the patient's home, the municipality or general practice, since to do so would result in the hospital carrying out less activity and thereby becoming less productive.

These years a paradigm shift towards value-based management is growing. There is an international trend towards focusing more on the value of care for the individual, the population and society.

Instead of measuring activity, one measures the effect of all the interventions combined. For instance, the number of operations is not important. Instead, it is important to assess the value for the patient and society of all the interventions, including the operation and rehabilitation. This creates incentives for collaboration across healthcare.

A new management paradigm is necessary in order for health service to deliver the best care for the patient and the economy and achieve the highest possible level of health in the population.



The Regions are working towards value-based healthcare

All regions carry out projects with the aim of testing value-based models. The regions have selected seven groups of diseases to test the models. Within each group, the regions are developing specific outcome measures important to the patients. The projects provide the regions with experience in managing healthcare initiatives based on the value they create. These projects are an important step towards the regions' vision of value-based healthcare.

Bornholm Hospital is selected as a project hospital to try out new management models with the goal of achieving better continuity of care. During the

project, the departments receive a fixed amount of money to fund the treatment of their patients. The budget is not determined by activity. This type of management can improve treatment for patients who suffer from multiple diseases, because it supports the hospital to carry out multiple interventions at the same time. Furthermore, it provides greater incentives for the hospital to work together with the municipality and general practice. The project helps to promote a coherent provision of care, improve the hospitals' cooperation with municipalities and general practice, and minimise hospitalisations.

Information from patients contributes to achieve greater value for the patient and for society

In order to achieve the best value for patients and society, hospitals need to gather information on patients' own experiences of treatment and outcomes of treatment continuously. This may include the patient's experience of their functional capacity or an assessment of postoperative pain. By using these types of data, the hospital not only places a focus on whether the surgery was successful, but also on whether the patient suffers from pain, is better to cope with their everyday life, or in some cases is able to return to work. Given that rehabilitation in most cases takes place within the municipalities, this creates incentives

for hospitals to cooperate with municipalities, since the achievement of the goals will depend on their contribution as well.

At the same time, the information supplied by patients can personalise care and ensure that conversations with healthcare professionals focus on matters that are of particular importance for the individual. As a result, the patient can avoid unnecessary check-ups. This will allow for a prioritisation of resources to those who need it the most.

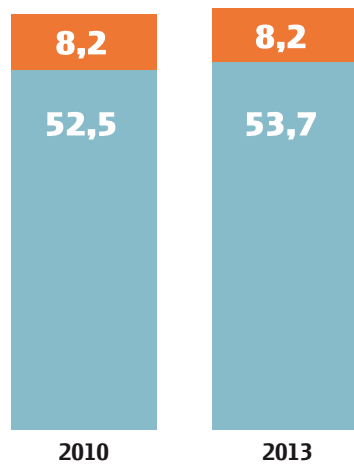


The Regions want to be assessed on the healthcare system's ability to keep the population healthy

The Regions will take responsibility for ensuring that the healthcare system works towards ensuring the best possible level of health among the population.

In order to promote a focus on health, it is important that the methods we use to assess the quality of healthcare reflect this focus. We have to assess whether we succeed with preventing illness and patients recovery.

The Regions focus on implementing the eight new national goals for quality in the health service. The goals set the framework for how we manage and assess the performance of the health service. One part of the healthcare sector cannot succeed in achieving the goals by themselves. It requires collaboration and contribution from multiple parts of the healthcare system. This creates an incentive for different stakeholders to collaborate across sectoral boundaries. In this way, the goals contribute to ensure continuity of care, and focus care to meet the needs and interests of patients and society. However, in the opinion of the Regions, there is a need to develop the indicators of the goals, since they do not in all aspects, reflect whether we succeed in ensuring the highest level of health among the population.



Expected years of living in good health (healthy years) and expected years of living in less good or bad health (healthy years lost) for a 16 year old man.

Source: "Danskernes Sundhed – Den nationale sundhedsprofil", The Danish Health Authority (2014).

■ Years of good health
■ Lost years of good health

National goals for quality in healthcare

In spring 2016, eight national goals for quality in healthcare were introduced:

- More coherent patient pathways
- Increased efforts for chronically ill and elderly patients
- Improved survival rates and patient safety
- High-quality of care
- Fast diagnosis and treatment
- Increased patient involvement
- More healthy life years
- More effective health care system

The national goals reflect the top political priorities in the healthcare system. They serve as a governance tool to ensure that all levels of the system – state, regions, municipalities and general practice – will work towards the same goal of providing excellent healthcare. For each goal,

a number of indicators have been set out to concretize each goal. In the opinion of the Regions, there is a need to develop the indicators so that they direct healthcare initiatives towards ensuring the best possible health among the population. The indicators should give a better indication of whether we are moving towards a sustainable and coherent healthcare system.

At present, we assess the goal of "Healthy life years" based on the indicators "average lifespan" and "daily smokers in the population". However, these indicators do not provide any indication of whether the years one has lived so far have been lived in good or poor health. It should be considered whether to add an indicator of "healthy years". The indicator is part of the Danish Health Profile.



The Regions will work to ensure that technological solutions contribute to a better use of resources

A wide range of new technologies are being developed and introduced. They will lead to radical changes to our society. In the years to come, the new technologies will revolutionise healthcare, including robots that can perform operations via remote control, artificial intelligent machines, which can help diagnose thousands of patients, personalised medicine that can be tailored to the patient's genetic profile, technologies that can optimise production and logistics, and 3-D printers that can print out organs.

In healthcare, there is an inherent force to innovate new medicines, treatment methods, and technologies are developed continually. We must strengthen innovation in the development of technological solutions and provide time and resources for the healthcare staff to assist in developing and testing new ideas. In addition, we must become better at cooperating with stakeholders outside of the health service such as tech communities and companies.

In order to ensure sustainable stakeholders it is essential that we invest in technological solutions. Technological solutions have great potential to optimise processes and logistics in healthcare. Robots can help free up time for medical staff, who instead can concentrate on tasks in which there is a need for human contact. Advanced surgical techniques and personalised medicine can serve to shorten treatment and help patients to get back to work and their everyday lives sooner. Other solutions will require a much more intensive investment of resources. It is important that we do not allow ourselves to be dazzled by technology, but always have an eye for prioritising resources in a way that provide the best value to patients and society.

Artificial intelligence in medical care

IBM has developed a supercomputer, named Watson, for developing artificial intelligence. So far, Watson is able to understand nine different languages and with relative ease digest a large amount of medical literature – as much as twenty million pages of research in ten minutes. Watson can be utilised by doctors as a tool to support decisions relating to the patient's treatment. This means that, in case of doubt, a general practitioner or a junior doctor can ask the computer questions and the computer can assist the doctor in reaching a more precise diagnosis and recommend the appropriate treatment based on the symptoms that the patient presents. The computer is constantly learning, with the result that the recommendations will only get better with time. Therefore, it is widely predicted that within few years, artificial intelligence will contribute to free up specialist resources, while diagnosis will become faster and treatment will improve.

Here in Denmark, a cancer ward has trialled a smaller version of Watson in three areas of can-

cer treatment. At present, Watson is designed to support treatment at hospitals in the United States. Therefore, Watson has yet to incorporate the European research and guidelines, which is necessary before we can use Watson in clinical practice in Denmark. There is great potential for a machine like Watson to play a major role in supporting doctors in the future. Particularly in relation to diagnosis and monitoring, artificial intelligence has a promising future. For instance, artificial intelligence can contribute to optimise the use of specialist resources in diagnostic imaging by automatically analysing x-rays of fractures or by filtering out mammograms that show no signs of breast cancer.

In addition, artificial intelligence will be able to process large amounts of data in order to establish patterns, thereby contributing to greater, faster and more cost-effective advances in research and development.

Care close to home

The Regions will provide personalised care as close to home as possible

Everyone, irrespective of their social background, is entitled to the same opportunities to a healthy life. We must personalise care based on the needs and circumstances of the individual. People must play an active part in healthcare, and the involvement of people should be a natural part of the health service – both in the diagnosis, treatment and rehabilitation phases, and no less in decisions concerning the organisation of patient care.

Healthcare must be accessible, and more people must have the option to receive care at home or close to home, so they can continue to live their everyday life. We also need to look at how new digital solutions and technology can be part of the solution.

Moving care closer to home will affect the way we work together and how we manage and organise healthcare.

This chapter addresses how hospitals, municipalities and general practice can contribute to ensure the highest possible level of health among the population and support care closer to home. It will also address how new digital solutions and technology will contribute to create a more accessible and sustainable health service



The Regions will promote a holistic perspective in the care of patients and engage other stakeholders in the provision of healthcare

Health is much more than the absence of disease. Being fit and healthy means being well both physically, mentally and socially. The health service is able to diagnose and treat disease, but it is by no means the health service alone that determines how we live and thereby our health and well-being.

Therefore, we must take a more holistic approach to patients – and not simply focus on their illness. Patients and their families must be involved and play an active role in their treatment. This will contribute to improve care results, increase quality of life and improve quality of care.

Together with the municipalities, we must examine the needs of the population in a broad perspective and become better at engaging other areas of the social welfare sector. This entails a need for knowledge about the effect of initiatives carried out in both the health sector as well as the social sectors.

For many patients, medication and other traditional treatments are not sufficient to help them recover or to ensure that they stay healthy. Social problems can affect a patient's willpower to stop smoking, despite a desire to do so. Lack of a social network can lead to loneliness, which in turn increases a patient's risk of developing illness.

Many general practitioners experience that some patients consult them repeatedly without being able to help the patient medically. These patients are often individuals who have social or mental problems or who are lonely or socially vulnerable. As it is now, general practitioners do not have the possibility to offer these patients alternatives to medical treatment. There is a need to integrate and develop social interventions in the treatment of this group of patients. This will help to increase patient's quality of life, promote healthier lifestyle and avoid costly hospitalisations.

Municipalities, regions, patients themselves or voluntary organisations and patients associations can manage the social initiatives and a large number of social initiatives already exist. However, it can be challenging for the healthcare professionals to keep track of the wide range of initiatives. Together with the municipalities, we need to explore how we can gain a better overview of existing social initiatives. Likewise, we need to expand the scope of alliances and partnerships between authorities and organisations.

Structural prevention and nudging

If we are to achieve the best possible health among the population, we need to become better at preventing risk factors that lead to illness and deterioration of illness. In order to obtain a profound effect of preventative initiatives, we need to promote a local environment that makes it easier to make healthy choices and supports a healthy lifestyle.

Structural prevention includes initiatives, which, via legislation, management and regulation, aim to create a framework for health promotion and prevention. Examples include legislation on mandatory use of helmets, the addition of iodine to salt and easy access to recreational facilities. Structural prevention is an essential mean to achieve equality of health. We must make the healthy choice the easy choice.

Another way to promote healthy choices is by nudging. Nudging means to influence people's choices in a particular direction without limiting their options. In this way, nudging supports structural prevention. Examples of nudging include making it more attractive to take the stairs than the lift or encouraging use of seat belts, etc. There are many opportunities to use nudging more systematically.



The Regions will work to make digital solutions a natural and integrated part of treatment

Digital and technological solutions create new opportunities for bringing care closer to home in the future and for engaging patients in their care. Solutions such as online booking, apps and telemedicine open up new ways for the health service to interact with patients – and for patients to determine where and when they would like to contact the health service.

Visit the doctor via your smartphone

In Sweden, a group of doctors has a digital general practice. When you need to talk to a doctor, e.g. about eczema, fever or another minor problem, it is possible to book a video consultation. The consultation is like a normal consultation but via webcam, and the doctor can provide the patient with advice, issue prescriptions and make referrals. This means, that the patient does not need

to visit the doctor in person and can consult the doctor wherever they are – e.g. at home in bed or at work. 50.000 Swedes have already signed up for this service.

Some private hospitals and clinics in Denmark have also begun to offer similar services.

Digital solutions open up new opportunities to support patients in managing their health and illnesses. Text reminders can help patients remember to take medication, and apps can for instance assist diabetics in monitoring their disease. In this way, digital solutions can help to ensure greater access to healthcare, prevent illness and deterioration of illness while at the same time helping to ensure a better use of resources.

The health service has a potential to further the implementation and use of digital solutions. Having said this, there is a need to create a better overview of which digital solutions are available and the potential uses of digital solutions.

“Click-first” – Prioritisation of the doctor and the patient’s time

A group of general practitioners in the UK use a “click-first” approach in the treatment of their patients. Before patients contact general practice, they are encouraged to fill out an electronic questionnaire on the doctors’ website. Patients can choose whether they would like to treat himself or herself with the assistance of information concerning their condition (e.g. back pain), whether they want advice on over-the-counter medicines to treat their condition, whether they need to contact the emergency department or whether they require an e-consultation with their general practitioner.

An evaluation of the service has shown that over a third of patients chose to treat the specific problem themselves. Altogether 60 per cent of all consultations carried out via “click-first” were without any need for the patient to attend the medical practice physically. The patients experience a high degree of satisfaction and 95 per cent of patients consider the solution “good” or “excellent”. The click-first approach is now spreading to more than one million patients in the UK, and there are plans to extend it even further.

Internet-based psychological support

In one Danish region, an internet-based treatment service has been set up for people who suffer from anxiety and mild to moderate depression. The treatment happens via a computer program that guides the person through a series of treatment steps including daily exercises. A psychologist supports and monitors the patient throughout the treatment and it is possible to contact the psychologist via mail or telephone.

It is the person themselves who choose whether to sign up for the programme. After signing up, a team of psychologists evaluates whether the patient is a suitable candidate for the programme. The assessment is based on a video interview with the patient. The programme ends with another video conversation, and information regarding the treatment is sent to the patient’s GP.

In recent years, new technological solutions have made it possible to move treatment closer to home. Treatment at home gives the patient more freedom to live their everyday lives close to their families. At the same time, it frees up resources for those patients who are unable to treat themselves. In this way, care at home and self-treatment are useful tools to ensure the best possible level of health and a more even distribution of health throughout the population.

Chemotherapy at home

Patients suffering from acute leukemia can now avoid lengthy hospitalisations and instead receive chemotherapy in their own homes via a programmed digital pump that gives chemotherapy several times a day. Previously, patients would be hospitalised for approximately a month at a time. Under the new scheme, patients can be at home for up to three days without requiring any contact with the hospital. After three days, the patient receives a new dose of chemotherapy and a check-up at the hospital. Patients can telephone the hospital department 24/7 if they have any questions.

Chemotherapy at home is a result of an idea from the staff. Management supported the staff to take time to explore and develop new ideas and this was a prerequisite for the development and implementation of the project. The implementation of chemotherapy at home has resulted in positive outcomes and a high degree of patient satisfaction. Every haematological department in Denmark is now implementing chemotherapy at home.



The Regions will support general practice to work proactively and manage care of patients suffering from the most common chronic illnesses

General practice provides an excellent opportunity to provide the population with personalised treatment. General practice helps the population throughout their lives; they interact with their patients both before they become ill, while they are in the process of becoming ill, and throughout the course of their illness. This puts general practice in the unique position of being able to prevent and detect illness at an early stage and maintain continuous contact with the patient.

In ensuring sustainable healthcare in the future, it is necessary that the regions support general practice to work more proactively to prevent illness and people becoming more ill. At the same time, the regions recognise an opportunity to empower general practice to take more responsibility for the treatment of a range of chronic illnesses and thereby provide personalised treatment and avoid costly hospitalisations.

This will require that hospitals support general practice by providing easy and systematic access to specialists. With the specialists on the side, it is possible for general practice to take more responsibility for treatment of chronic illness and reduce the need to refer patients to the hospital. In addition, talking to specialists can contribute to enhance the expertise of chronic care among general practitioners.



The Regions will improve treatment of patients with complex and intensive needs and strengthen out-of-hospital care

Hospitals provide specialised care to patients with complex and intensive needs. Over the past ten years, the regions have focused on making hospitals more efficient and specialising care. This has resulted in excellent outcomes for patients including high quality, short waiting times and better treatment outcomes.

In the future, an even greater number of patients will suffer from complex, intensive or acute medical needs that require highly specialised treatment. With respect to this group of patients, it would not be safe or financially feasible to provide treatment outside of hospital. It is crucial that we continue to work to provide this group of patients with effective treatment of a high standard.

In the future, there will be more patients having complex needs and suffering multiple diseases. This requires that healthcare professionals with knowledge and expertise from different treatment areas work together in order to give the patient the best and most efficient treatment.

Reorganising the care of patients suffering from multimorbidity

In 2016, a region opened the first outpatient clinic, at which staff of different expertise work together to diagnose and treat patients with multiple symptoms or illnesses. The outpatient clinic brings together nurses and doctors from multiple departments in one place, so that patients with

multiple illnesses can receive treatment for multiple conditions on the same day. This arrangement also makes it possible to draw on multiple medical specialists in the investigation of complex and ambiguous symptoms. This saves the patient time and the health service resources.

A smaller group of hospital patients suffer from particularly complex needs and need extensive treatment. This group of patients needs extra support from healthcare professionals if we are to prevent the deterioration of their conditions and prevent unnecessary hospitalisations. This may take the form of assistance, such as a nurse who follows the patient closely and, together with the patient, puts together a plan of action, which the nurse will follow up on via telephone. It can include assistance to navigate the healthcare system and remembering and organising appointments. The Regions will develop and systematise various types of patient support interventions for this patient group.

Discharge adjusted to the patient's risk of readmission

There are a number of international examples of personalised discharge procedures based on the patient's risk of readmission. The healthcare professionals stratify patients based on data about length of stay, cause of hospitalisation, comorbidity and the number of acute admissions over the past six months.

The staff organise the discharge procedure based on the patient's risk profile. At every discharge, the staff makes a plan of discharge. If a patient is at moderate risk of readmission, relevant health professionals review potential obstacles and risk

factors together with the patient prior to discharge. If the patient is at high risk of readmission, the discharge procedure will further include a cross-disciplinary consultation, including relevant stakeholders outside of the hospital.

Risk stratification gives the hospital department an opportunity to prioritise their limited resources to caring for those patients most in need of more intensive care. In this way, risk stratification helps to ensure the highest possible level of health for the money invested.

If we are to achieve the goal of securing the best possible level of health for the entire population, the regions must take a broader responsibility for healthcare. This entails that hospitals to a higher degree take a proactive, holistic and engaging approach in their interaction with patients.

The goal of ensuring the best possible health for the population entails that we no longer view specialised treatment in hospitals as something separate from the follow-up treatment and care that is provided outside of hospital. Therefore, it is necessary for general practice and municipalities to have easy access to expertise at the hospital. The hospitals will largely, need to support the other parts of the health service by providing consultancy to patients, general practice and the municipalities. In that way, it will be possible to move more treatment out of hospital. At the same time, hospitals must take responsibility for ensuring continuity of care.

The future hospital must proactively encourage innovation and intelligent solutions that place patients in a better position to carry out treatment at home. It is important that management and staff have the necessary skills and flexibility to develop better solutions for patients. Home care helps alleviate the increasing burden on hospitals while allowing people to have a more flexible life. With support from hospitals in the form of guidance and monitoring, patients are, empowered to manage care at home in a safe and secure manner.

Paediatrics

Each year multiple children are hospitalised with serious illness. Some of these children need to be hospitalised for long periods of time. In such circumstances, it may be a challenge to make family life work. At the same time, it is very important for the sick child and its healthy siblings to keep the family together through the period of illness. In several parts of Denmark, family centres have been established in which families with a child hospitalized long-term is able to live in close proximity. The family itself sees to the running of the house. These centres contribute to providing the family with safe surroundings and allow the family to carry on a day-to-day life together.

Children are a unique patient group with different needs than adults. There has been success with the systematic involvement of patients, relatives

and staff in the design of specific children's hospitals and departments to ensure the best environment for the treatment of children and young people. The involvement of patients in a major construction project has given staff new insights into children and families' needs, and these insights have been incorporated into the architect's plans for the new hospital. The staff looked at current patient treatment programmes to identify waste. This has revealed a need for the creation of flexible outpatient clinics where relevant specialties and professional groups can provide care together. At the new children's hospital, there will be a greater focus on integrating care, research and education - and this will all take place in the context of interaction between patients, health-care staff and occupational health and safety experts.

Postscript

“HEALTH FOR ALL” is Danish Regions’ idea of how we can continue to have a sustainable healthcare in Denmark.

We need a new perspective on healthcare. Instead of focusing on disease, we need to focus on health. The role of the Regions should be seen as more than simply the role as hospital owners; we need to see ourselves as part of a bigger partnership that works together to provide the best care. The goal should be to ensure the best possible level of health for the entire population.

The goal of achieving the best possible health for the entire population requires major re-forms of the entire healthcare system: the way we work, collaborate and manage our provision of care. It requires a change of culture in the regions, in hospital management, on the part of our municipal partners and among healthcare professionals. These are not changes, which we can achieve from one day to the next. It is part of an ongoing development, which must be supported by action.

Implementing these changes will require that we look at how we – across sectors – provide the population with continuity of care grounded in the needs of each individual, including the risk of developing illness or deterioration of illness.

Together with our partners within the health service, we want to develop the way we manage healthcare. Throughout the health service, we need to have common goals and focus on the total value of the service provided to the population. If we do this, we will achieve a more coherent health service and optimise the use of resources.

We must develop the way we collaborate across the health service in order to provide patients with the best and most efficient service possible. We must be open to organisation and performance adjusted to lo-

cal conditions. We want to test new forms of collaboration and experiment with new joint organisations of care and joint financing.

Danish Regions would like to promote strong partnerships between hospitals, general practice, municipalities and private players. Partnerships that support sustainable solutions, allowing us collectively to provide the best possible healthcare for the money invested, grounded in the population’ needs.

Prevention of illness and initiatives to prevent deterioration of existing illness is key to achieving the highest level of health among the population. We must use data on the population’s needs systematically and as a foundation for the planning of health initiatives for the population. We need to use analyses of the patient’s pathway across healthcare sectors. Furthermore, we must make far greater use of digital solutions and the opportunities technology brings.

We do not deliver a fixed solution for how to achieve sustainable healthcare. Yet, we have proposed a range of steps, which we consider necessary to take in order to achieve the goal of a sustainable healthcare. Some of the steps, we can implement ourselves, but most of the steps will require the collaboration across the healthcare continuum. Some steps can be realised in the near future, others will take a longer period.

The road to a sustainable healthcare is a long one. It will require that all parts of the health service combine their efforts to achieve the highest possible level of health in Denmark. Danish Regions would like to invite all relevant parties to participate in the drive towards a sustainable healthcare.

We look forward to continue the work of ensuring HEALTH FOR ALL

The way forward

In this section, Danish Regions proposes a range of actions that can support our way forward. The actions described in the following will not be enough to meet the future challenges. The transformation health service has to undergo will be achieved via a process of continuous development. The actions set out below are steps on the way to a sustainable healthcare.

The Regions will take responsibility for ensuring the best possible organisation of care

New initiatives will be developed and evaluated based on whether they contribute to a more positive outcome for the individual, the population and the economy as a whole.

- The Regions will initiate a project in which hospitals, general practice, the private practice sector and private clinics and hospitals work together in an integrated healthcare model with a shared goal and budget. The project could look at a specific population group or a particular type of organisation – e.g. health centres.
- The Regions will initiate a project focusing on patients suffering from severe psychiatric illness who receive treatment from both region and municipality. The project will aim at promoting cooperation between regions and municipalities via joint financing and shared staff. Patients will experience continuity of care irrespective of whether it is the region or the municipality who provides the care. The project should serve to reduce the risk of deterioration of patients' conditions and thereby prevent readmission.

The Regions will work to ensure that the planning of healthcare interventions is based on knowledge and data

Healthcare should be grounded in the population's risk of experiencing deteriorating health.

- The Regions will place a strong emphasis on providing the entire healthcare system with analyses of the impact and value of the care provided for the patient, the population and the society. These analyses must be utilised systematically to promote innovation across the entire healthcare system.
- The Regions will work towards improving sharing of patient data throughout the healthcare system. Treatment, quality development and research are closely linked. For this reason, the Regions believe that legislation must be modernised to create the best conditions for the full potential of the use of patient data to be realised.
- The Regions will contribute to ensure that the entire healthcare system takes a much more proactive approach and use risk stratification and population segmentation to prevent illness and the deterioration of existing illness.
- The Regions will contribute to enhance the use of data from the Health profile systematically within the collaboration between hospitals, municipalities and general practice. Data should be used in the planning of care to achieve the best possible level of health among the population.

The Regions will work to improve the cross-sectoral collaboration

We need to reconsider the framework for cross-sectoral collaboration.

- We want to develop the concept of health agreements. The political element of the agreement should set out a common direction for local initiatives. It should be possible to enter and adapt agreements through the period as the need arises in the population. This requires a revision of the legislation concerning health agreements.

The Regions believe that a change from activity-based management to value-based management is necessary in order to achieve better value for money in healthcare provision

Management and incentives must ensure that the healthcare service provides the best value for the population and society.

- The Regions will assess the value and impact of the patient's entire course of treatment in order to promote efficiency and continuity of care
- The Regions will develop and test differentiated financing models, which support efficiency and continuity of care.
- The Regions will strive to eliminate the requirement of productivity the Regions experience.

The Regions want to be assessed on the healthcare system's ability to keep the population healthy

The Regions will work to promote incentives for the whole of the health service to focus on achieving the best possible level of health among the population.

- The Regions will promote development of the indicators for the eight national goals for quality in healthcare such that they support the goal of achieving the best possible level of health among the population.

The Regions will work to ensure that technological solutions contribute to a better use of resources

There is need for systematic assessment of the new technological possibilities with respect to whether they contribute to creating the most possible health for the money invested.

- The Regions will develop the Danish Medicines Council so in time, the Council will as well assess new technologies for clinical treatment. Assessment of new technologies must be based on the value they add in terms of providing the highest possible level of health in return for the money invested.
- The Regions will gather knowledge about new technologies, such as artificial intelligence, and test out these solutions in the context of the Danish healthcare system. This will help to free up resources and prevent malpractice.
- The Regions will promote ourselves as an attractive partner for companies in the development of new technological solutions for healthcare. We will do this by setting up long-term partnerships with consolidated tech companies working with development, testing and implementation of new technological solutions and services for healthcare.
- The Regions will work to support faster scaling and implementation of the innovative solutions, which the Regions have developed in partnership with the private industry.
- The Regions will work to promote valuable purchases, which can contribute to efficiency in an overall economic perspective, and support innovation.

The Regions will promote a holistic perspective in the care of patients and engage other stakeholders in the provision of healthcare

In order to achieve the best possible level of health among the population, it will be necessary to focus on health promotion and prevention. Health must be incorporated across the welfare sectors in order to achieve a more holistic approach to health.

- The Regions will examine possibilities for alliances and partnerships with a broad range of stakeholders, including voluntary organisations and the social sector, in order to prevent illness and the deterioration of illness.
- The Regions will look at how we can further the knowledge of various social services in order to promote a more holistic approach to patients.
- The Regions will encourage documentation of the outcomes of social interventions.

In “Health for Life – prevention is a necessary investment”, you can read more about the regional strategy for prevention.

The Regions will work to make digital solutions a natural and integrated part of treatment

Digital solutions can provide new ways for the population to access healthcare while helping to focus resources in order to achieve the best possible level of health for the money invested.

- The Regions will develop a strategy for the digital transformation of the health sector. The strategy will support a better use of potential new technologies and a quicker translation and implementation of approved solutions benefiting patients and health professionals.
- The Regions will certify health apps with the purpose of providing a qualified overview for the population and the clinicians. This will serve to support a more systematic integration and utilisation of apps in the treatment and monitoring of illness. Apps will help to provide better opportunities for self-monitoring and self-treatment.
- The Regions will initiate a project in which international experiences of digital access to general practice are examined with the purpose of testing and implementation of similar portals in Denmark.
- The Regions will expand the use of internet-based psychiatric treatment in Denmark, in order to provide free psychological counselling without referral to people suffering from mild to moderate anxiety and depression. Evaluations of the scheme will be collected and used in order to examine whether the scheme should be expanded to other patient groups within psychiatric care.

The Regions will support general practice to work proactively and manage care of patients suffering from the most common chronic illnesses

General practice must share the goal of achieving the best possible level of health among the population and contribute to the goal by providing more services for patients suffering from the most common chronic diseases and by working more proactively.

- The Regions will secure general practice easy and systematic access to specialists in the form of telemedicine solutions, hotlines, e-mail correspondence and visits by specialists in general practice.
- The Regions will support general practice to work proactively by surveying international experiences of databased solutions, with a view to implementation of the solution in Denmark.

- The Regions will initiate a project to support general practice in working more proactively with the help of data concerning specific patient groups. The target group may for instance be diabetes or COPD patients.
- The Regions will secure close links between general practice and hospitals via hospital management so that hospitals to a higher degree have a perspective of the needs of general practice.

In “Vision for general practice”, you can read more about regional objectives for the future of general practice.

The Regions will improve treatment of patients with complex and intensive needs and strengthen out-of-hospital care

In the future, the work of hospitals will largely be focused on treating citizens with complex, acute and intensive needs. Furthermore, hospitals will in the future take more responsibility to support other players in the health system in the provision of care.

- The Regions will develop a strategy for the future hospitals. The strategy will focus on how hospitals can contribute to achieve the best possible level of health among the population.

- The Regions will focus on developing hospitals in a way so that they to a higher degree can support the rest of the healthcare system.
- The Regions will develop and implement proactive support targeted at the most vulnerable patients and patients who are at high risk of repeated acute admissions.

