## Research Agenda 2025-2027

The independent Netherlands Institute for Health Services Research (Nivel) develops and shares knowledge to improve the quality and accessibility of healthcare and social services.

Read about the direction we plan to take over the next three years, and discover our unique data and research infrastructure.



## The role of Nivel in healthcare and social services

The experts at Nivel perform high-quality research and data analysis, develop knowledge and make recommendations for the continuing improvement of and innovation in healthcare.

Knowledge from research, enhanced with knowledge from experience, is vital to ensure that the correct decisions are made in the healthcare sector, and in the development and implementation of national, regional and local policies. Nivel's knowledge is accessible to all via our website, and our experts are of course happy to discuss it.

This Research Agenda examines the various aspects of quality in healthcare, including accessibility, timeliness, effectiveness, patient focus, safety, availability, affordability and sustainability. It sets out how we develop knowledge in order to help find solutions to complex societal challenges affecting healthcare and social services.

We have deliberately opted to produce a Research Agenda that continues ongoing research, and focuses on relevant societal challenges. To enable us to remain agile and up-to-date, this Research Agenda covers a period of three vears. However, Nivel's broad knowledge base also allows us to take a broad, longer-term view.

In tackling a diverse range of issues, we focus on the following three groups of stakeholders.

## Patients, clients and the public

As life expectancy rises, the number of people with chronic conditions and/or dementia is also on the increase. The burden on informal carers is also growing. There is inequality in life expectancy and health between people with different levels of education, and between regions. Around one in three people in the Netherlands have difficulty understanding information on health and healthcare and acting accordingly. Our studies conducted with and for patients, clients and the general public show that they need more clarification, support and customised care.

They are concerned about the accessibility and affordability of healthcare in the future. Shortages of medicines and other healthcare products also cause uncertainty and stress.

## Healthcare providers

Healthcare providers highlight in discussions, surveys and reports the pressure on the accessibility of the healthcare system, and the affordability and quality of disease prevention, treatment, support and care. This has a negative impact, increasing

pressure of work and undermining job satisfaction. Given current and future staff shortages in the healthcare sector, tackling these issues will be a huge challenge.

Alongside the formal healthcare sector, we also increasingly look to work with social services, informal carers and technological innovations.

Healthcare providers

## National and local authorities

National and local authorities are looking to organise healthcare differently, with more regional collaboration in healthcare and social welfare, digitalisation, artificial intelligence (AI), improvements to primary healthcare and measures to make work in the healthcare sector more attractive. They also focus on patient self-management and encouraging participation by people with chronic conditions or disabilities, people with poor health skills and people in vulnerable situations.

The national government aims to achieve a health information system in which data exchange between healthcare providers, patient access to information, data availability and reuse of healthcare data to improve healthcare play a key role.



the public



Research from three perspectives

National and local authorities

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## Unique data and research infrastructure

- Research projects across the entire

Innovative long-running projects /

Coordination of implementation

spectrum of healthcare

monitoring programmes

## **Databases**

- Nivel Primary Care Database (est. 1970; 500 participating GP practices)
- Nivel Monitoring Stations (est. 1970; approx. 120 participating GP practices)
- Nivel Healthcare Professionals Register
- Learning from Nursing Home Data Register (est. 2022; approx. 40 participating nursing home groups)
- GP Register Network in the Dutch Caribbean (est. 2021: 34 of the 56 practices in Aruba, Bonaire, Sint Eustatius and Saba)
- Nivel Communication in Healthcare Database (est. 1975: contains more than 18,000 audiovisual recordings of consultations)

## **Nivel Healthcare Consumers** Panel

- established 1991
- approx. 10,500 members (some of whom are patients)
- topics take public perspective: quality of healthcare, developments in healthcare, healthcare system



## **Nivel Nursing & Care Staff Panel**

- established 2001
- approx. 2500 nurses, care workers and support workers
- topics: labour market, job content, cooperation with social services



**Nivel Living Together Panel** 

- approx. 350 members with

intellectual disability, and

- topics: housing, daily life,

- Nivel Relatives Panel (est.

of disabled people)

2024: approx. 250 relatives

quality of life, families' need

a slight or moderate

- established 2006

250 relatives

for support

## Centres of Excellence

- Nivel Centre of Excellence on 'Social vulnerability and inclusion in research'
- Nivel Centre of Excellence on 'Reuse of healthcare data from primary and chronic care'

## **Monitors**

- Digital Healthcare Monitor, in collaboration with RIVM and NeLL (est. 2013; approx. 8000 members from various Nivel panels and Royal Dutch Medical Association doctors' panel)
- Dementia Monitor, in collaboration with Alzheimer Nederland (est. 2013; approx. 10,000 informal carers and 1100 people with dementia)
- IZA 'Towards Stronger Primary Healthcare 2024-2026' Monitor and IZA 'Towards More Hybrid Healthcare 2024-2026' Monitor (est. 2023)
- Participation Monitor (est. 2005; data from the National Panel of Chronically III and Disabled People, Nivel Living Together Panel and Nivel Healthcare Consumers Panel)
- Patient Safety Monitor at 20 hospitals and 15 independent treatment centres, and over 20,000 case files (est. 2004)
- Lung Disease Monitor (est. 2001; approx. 900 participants aged 15 and over)

## Data and research infrastructure

## **Disabled People**

- established 1998
- over 3500 chronically ill or physically disabled people
- topics: healthcare, social and labour market participation
- Lung Disease (est. 2001; approx. 1100 members)
- (est. 2025; run for and by young people aged 18 to 30 with a chronic illness or disability)

## **National Panel of Chronically III and**

- living independently
- Nivel Panel of People with
- Nivel Young & Strong Panel



and internationally

Research

research



## Nivel expertise and core values

Nivel develops and shares knowledge as a leading internationally-oriented independent national research institute.



## Specialises in applied healthcare research

Our knowledge is based on scientifically sound national and international research and on data that Nivel gathers and analyses on a daily basis. This knowledge helps continually improve and innovate in healthcare.

## We have expertise in:

- Labour and organisational issues in healthcare
- Communication in healthcare
- Pharmaceutical care
- General practice
- Infectious diseases in primary healthcare
- Organisation and quality of healthcare
- Allied healthcare

- Disasters and environmental emergencies
- Nursing, care and elderly care
- Healthcare data and learning healthcare systems
- Healthcare and participation for people with chronic disorders
- Healthcare from the patient perspective
- Healthcare system and management
- Health disparities
- Integrated healthcare
- Chronic care
- Participation, the patient perspective and co-creation in research

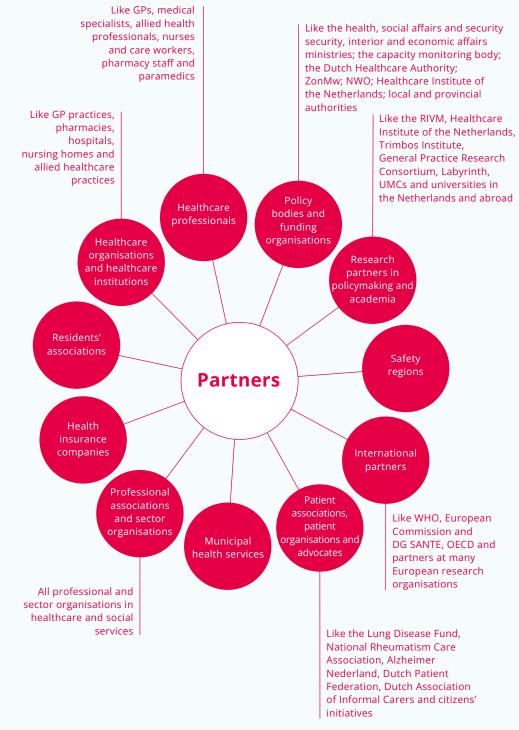




## **Partnerhips**

Nivel develops and shares knowledge with and for partners. We also gather existing knowledge, to make it accessible to policymakers, professional practitioners, healthcare organisations, patient organisations and citizens' initiatives.





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## The four societal challenges

Using tools, methodologies and guidance developed in our research into healthcare and social services, we translate knowledge and insight gained from research into practical applications, to support our partners and help find solutions to four relevant societal challenges.

These societal challenges do not exist in isolation; they are interlinked, and together they have implications for the wider ambition of achieving a healthy and resilient society in which the public, patients and clients are offered the correct care and continuity of care.



## Being healthy and staying health





## The challenge to be healthy and stay healthy

Being and staying healthy is a challenge for Dutch society, in terms of the ageing population, the threat of infectious disease and the need for an integrated approach to health. We see acute and chronic conditions leading to a greater burden of disease among elderly people, partly as a result of multimorbidity. The unpredictability of infectious disease, an unhealthy living environment and the effects of climate change all have a major impact on our health and wellbeing. Proactive healthcare, prevention, lifestyle and the living environment, and the complex interactions between them (the 'Health in All Policies' approach) are thus becoming more important, as people, animals and natural systems interact.

## What does Nivel do?

The up-to-date monitoring and surveillance figures we have provided during flu or RSV epidemics since 1970 have been helping GPs and other physicians prepare for peak periods when many patients present with flu or respiratory symptoms. Since 2014 we have been producing a weekly update on disease and healthcare demand in the Netherlands, based on some two million patients who participate in the Nivel Primary Care Database (for general practice) and the Nivel Monitoring Stations. We also publish an annual survey of health problems in the population. These figures are vital for policymakers and healthcare organisations to assess what healthcare services are needed. Nivel also gathers figures from allied healthcare professionals' records, including physiotherapists, occupational therapists and dieticians, from elderly care specialists and from out-of-hours GP practices offering emergency care. These data are an important source of information for researchers, policymakers and MPs, made available in our publications and as key indicators in the 'State of Public Health and Healthcare'. They provide evidence to help government ministries and professional associations determine their policies on healthcare.

Our team of data specialists and researchers allow us to provide an insight into health data through scientific research based on qualitative and

quantitative methods. Our data science work helps develop new methods, including AI for healthcare. Our figures on disease and healthcare are important for providing early warnings of outbreaks and highlighting the long-term impact of measures. We are working as part of a large consortium measuring the long-term effects of the COVID-19 pandemic, along with public health and safety body GGD GHOR Nederland, the National Institute of Public Health and the Environment (RIVM) and others.

We have been working with the Healthcare Institute of the Netherlands since 2020 at a research collaborative centre providing 'Routine healthcare data for appropriate care', researching the uptake and substitution of care.

Finally, the Nivel Centre of Excellence on 'Reuse of healthcare data from primary and chronic care' provides expertise on the reuse of routinely gathered healthcare data in accordance with standards of independence, quality, robustness and integrity (data governance). We also advise on the use of primary healthcare databases for policy and research.

## What questions about being and staying healthy can Nivel help you with?

Our ambition is to use our expertise and research to help find solutions for a healthier society, and to reduce health disparities. We publish all our research

results in national and international journals, and present them at meetings and within our own network.

You can contact us to request data and to perform research independently or in collaboration using data from the Nivel Primary Healthcare Database, the Learning from Nursing Home Data Register and our panels of patients, clients and members of the public, for example. You can also use our tools, methods and guidance via our website. Visit our website for more information about our experts and panels, such as the Nivel Healthcare Consumers Panel, the National Panel of Chronically III and Disabled People and the en het Nivel Living Together Panel.

Our stakeholders come to us with research questions on subjects like:

- Chronic disease and multimorbidity.
  We can help you develop an integrated strategy based on trends and care pathways identified among the two million patients in the GP register.
  This includes diabetes care, substitution of care and elderly care.
- Public health and the living environment. Nivel can gather relevant characteristics of the general population, the region and specific at-risk groups in relation to their living environment (such as age, sex, social vulnerability, symptoms, medical conditions, uptake of healthcare, prevalence of comorbidity, use of medication).

- Infectious disease. Nivel monitors infectious disease in the Netherlands, in collaborations with the RIVM, via its Monitoring Stations and its weekly monitoring programme.
- Specific groups, such as people with cancer, pulmonary disease, dementia; children with obesity; socially vulnerable groups. Our knowledge of these groups allows us to help national, regional and local authorities analyse figures and trends.



# Towards an inclusive society



An inclusive society is a society where everyone counts. A society where social amenities like healthcare, education and sport are accessible to all, irrespective of background, age, sex, education, religion, sexual preference and any illness or disability. This is what we stand for at Nivel. We have not yet achieved such

a society. The chances of living a healthy life are not equal in the Netherlands. There are still large health disparities based on age, education and income. People with a lower level of education, for example, have a shorter average life expectancy than people who are more highly educated, and they also spend fewer years in good health. Health disadvantage is caused by factors like poorer living conditions, more concern about making ends meet, which causes chronic stress, and also less active

knowledge of and skills associated with health and care. Finally, a lack of digital skills can potentially enhance existing disadvantage among people in socially vulnerable situations.

## What does Nivel do?

For over 25 years, Nivel has been conducting research on a range of different groups, such as people with limited health skills; people with chronic illnesses, physical disabilities and intellectual disabilities; elderly people with dementia; young people with psychological problems; migrants, and people affected by disasters. Members of these groups actively contributed to the design, form and implementation of these studies (through participatory research, co-creation and citizen science). This helps towards an inclusive society, as it allows everyone to take part and enjoy the same opportunities, including in terms of accessible and appropriate care and support.

Our research results give an insight into trends in participation and the experiences of people in vulnerable situations as regards the accessibility, affordability and quality of healthcare. It is important to understand the background to socioeconomic and sociodemographic health disparities and individual health skills, and we research these subjects too. We develop creative methods and tools to enable the public, patients and clients to participate more in society. Administrators and professionals can

use the results to hone and improve their policies and offer more customised care. The experts at Nivel collaborate on a national and international basis, and are regarded as reliable sources of information for the healthcare sector on matters such as health skills, patient participation and inclusive research.

One of our studies is the National Panel of Chronically III and Disabled People, established in 1998, in which we ask over 3500 people with a chronic illness and/or physical disability about their experiences of healthcare and participation, and what they would like to see in these areas. Another example is the bodymap tool UP!, a digital conversation tool which young people can use to visually inform their practitioner about what is happening in their head and body, and the impact of those around them. Our Nivel Healthcare Consumer Panel, the Dementia Monitor and the Nivel Living Together Panel also provide relevant data for many healthcare and policy organisations.

Our centre of excellence on 'Social vulnerability and inclusion in research' shares up-to-date knowledge and experiences related to the design and implementation of inclusive research among, and with, socially vulnerable groups. Diversity and inclusion are the main focuses. We also conduct our own research in this area, and advise researchers, healthcare providers and policymakers who are planning to set up inclusive research projects.

We also offer training designed to make research more inclusive.

## What questions about an inclusive society can Nivel help you with?

Stakeholders come to us with various questions about data and research methods, including:

- What are patients, clients and members of the public happy with in the healthcare sector? What do they think could be improved?
- How can we improve healthcare for people in a socially vulnerable position?
- How many people in the Netherlands have limited health skills?
- What are patients, clients and members of the public concerned about? How can they be offered better support?
- To what extent do the Dutch public have faith in the healthcare system? And in their care provider?
- How can people in a socially vulnerable position be more effectively involved in research?
- How can Nivel help policymakers and healthcare professionals with the inclusion of vulnerable patients, clients and members of the public?
- What are good forms of patient participation and co-creation?
- To what extent are questionnaires available in other languages, making it possible to reach a larger group of people?

Nivel can help you with research, knowledge, advice and a network for independent inclusive research, research methods with patients, clients and members of the public, and the interpretation of data. Our experts can orientate themselves quickly, and on an interdisciplinary basis, to your research questions, in order to perform research in collaboration. You may use our tools and guidance. You can also access academic and societal publications about an inclusive society on our website.



## The healthcare professional of the future.



## The challenge of defining the healthcare professional of the future

Demand for healthcare is growing in both volume and complexity, while the number of healthcare professionals continues to fall short. Training more healthcare workers, informal care and innovation are regarded as potential solutions, but they will by no means be sufficient. It is therefore important to take a wide-ranging look at the

healthcare professional of the future, and to how they will work. Collaboration between healthcare providers is becoming more and more important, and it is also vital to decide what skills and qualities a client's informal support team should ideally have. Al and digitalisation are also making it possible to work in different ways. What the healthcare professional of the future will be like differs from sector to sector, however, and a lot of research and knowledge development are still required.

## What does Nivel do?

For over twenty years, Nivel has been performing labour market analysis for the healthcare professions, particularly capacity forecasts. In 1999, along with the Capaciteitsorgaan, the body that monitors capacity in the sector, we developed a capacity forecasting model that is used for various national and regional training programmes, professions and sectors in healthcare. The underlying mathematical model is regarded internationally as an example of 'best practice'. The model projects future developments in healthcare supply and demand, and calculates the number of students that must enrol in training for healthcare professions so that healthcare providers can deliver the required capacity in the future. The model can also be used to analyse the impact of job differentiation, reductions in non-appropriate care and use of technology and AI in healthcare. Since 2001 we have been surveying 2500 nurses, nursing specialists, care workers, counsellors and nurse practitioners on the Nivel Nursing & Care Staff Panel for their views on technological innovations, redefinition of roles and AI, including innovations to reduce the administrative burden. The panel is representative of the national complement of care providers.

Another unique source of data is the 'Nivel Healthcare Professionals Registers'. Using this database, since 1975 we have been publishing annual data on all

GP practices in the Netherlands, the availability of GPs and their support teams. This allows us to monitor problems in the GP care labour market on a national and regional basis, including problems with filling vacancies and providing services, practices not taking new patients, and continuity and expansion of GP practices. Another subject of research is multidisciplinary collaboration in healthcare, with research questions such as what determines the success of collaboration beyond the boundaries of one's own organisation and profession, and what form collaboration with care providers from the social services sector. informal carers, volunteers, patients and clients takes.

Alzheimer Nederland and Nivel developed the Dementia Monitor, issued every two years, in 2013. In 2024 no fewer than 10,000 informal carers and 1100 people with dementia completed the guestionnaire. As a result, we know that informal carers often feel that their care responsibilities for a parent, parent-in-law, friend or neighbour, combined with their own family and work, are an excessive burden. The results of the monitor give local authorities, health insurance companies and care providers specific ways of optimising the deployment of carers to assist people with dementia and their informal carers. This has the potential to create a learning healthcare system that adapts to the needs of those it serves.

As regards the sustainable employability of care givers, Nivel studies the reasons why professionals leave the care and welfare sector, on behalf of RegioPlus. We also explore ways of preventing loss of staff and retaining professionals. We study the position of occupational health specialists and insurance company doctors, who are professionally concerned with prevention, resilience and working conditions. Examples include projects concerning delegation of duties, shortages in curative occupational healthcare, and collaboration between GPs and occupational health specialists. We perform similar research for the Ministry of Education, Culture and Science, which funds training. We also study the position of forensic pathologists, delegation of duties, reassignment of duties and centralisation on behalf of the Ministry of Justice and Security and the Research and Documentation Centre (WODC).

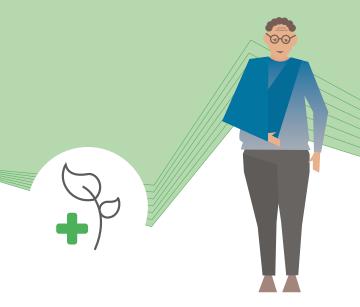
## What questions about the healthcare professional of the future can Nivel help you with?

Nivel offers independent research on the position of and labour market for healthcare providers, both regionally, nationally and internationally, with a view to the future of healthcare. You may contact our professional panels and registers with requests for data, or to perform research independently or in collaboration. We perform practice- and action-oriented research for a range of stakeholders on subjects including:

- Strategic staff planning using the Skillmix tool
- Research on the use of guidelines and quality standards by professionals, using data from the Nivel Primary Care Database and the Nivel Nursing & Care Staff Panel.
- Regional labour market analyses
- Tools and workshops to encourage healthcare professionals to consider patient safety, such as the Safety II reflection cards
- Cultural research on patient safety
- Research into the competencies and skills of healthcare workers

Nivel also offers expertise, practical application of knowledge and advice on issues related to the labour market, working practice reform, training and collaboration in healthcare. We perform independent research, in collaboration if desired, and we interpret data from the Netherlands and abroad. We publish the results of our research in renowned national and international journals and on appropriate websites.

## Sustainable healthcare



## The challenge of achieving sustainable healthcare

There are many different aspects of sustainability in healthcare. The focus of our research is on providing care that remains accessible, high-quality and affordable for all in the future. But it is by no means certain whether subsequent generations will still be able to access the

wide range of services that are currently available. With a rapidly ageing population, shortages of healthcare workers and rising healthcare costs, this is a major challenge. Sustainability also concerns the environmental burden of healthcare. To help curb climate change, the healthcare sector must reduce its carbon emissions, use resources more sparingly, and reduce pharmaceutical residues in drinking water. The challenges exist at several levels, from micro to macro, in

policy and in practice, and among patients, clients, members of the public, healthcare organisations and healthcare workers. The organisation of the healthcare system therefore requires change and innovation. The focus of this Research Agenda is on the future readiness of our healthcare system, different ways of working in the sector using digital innovations, and reducing the environmental burden of healthcare (Planetary Health).

## What does Nivel do?

One good example of innovation research is our annual Digital Healthcare Monitor, compiled in collaboration with the National Institute of Public Health and the Environment (RIVM) and the National eHealth Living Lab (NeLL). This shows us that a growing number of healthcare workers are increasingly using digital tools. This often helps save time, and in other cases telemedicine enables patients to be cared for without having to leave their home. Care users have their own reasons for using digital healthcare. It enables them to be self-reliant and prepared for the future and to develop the skills required to use digital healthcare, by learning from experience. In this way, more patients and clients can be served with fewer staff.

As part of the Cross-sectoral Care Agreement (IZA) Nivel monitors the strengthening of primary care from the perspective of both healthcare workers and users. The primary healthcare sector responds to the vast majority of demand for healthcare in the Netherlands.

Nivel is working on several projects with healthcare workers, healthcare organisations and other research institutes to establish regional and European learning networks.

We also study organisational and management issues in primary healthcare, specialist medical care and chronic care. We perform national, regional and local studies of the accessibility, quality and affordability of healthcare, with the aim of enhancing people's health, wellbeing and resilience (through citizen initiatives and networks). Research on ways of reducing the environmental burden of healthcare addresses issues such as cutting waste in the healthcare sector, prescribing sustainable medication and the behavioural and systemic changes needed to allow this to happen. Nivel also has data that reveal the impact of climate change on public health and people's demand for healthcare.

## What questions about sustainable healthcare can Nivel help you with?

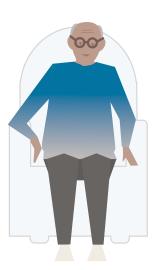
Nivel combines data from its registers, panels and public platforms to give a broad perspective. You may contact us with requests for data and to collaborate on research.

We address research questions such as:

- To what extent does avoidance of healthcare lead to higher healthcare costs, and reduced accessibility and affordability?
- To what extent are the public insured against unexpected healthcare costs?
- To what extent has the commercialisation of healthcare impacted its quality and accessibility? What business models have contributed to this?
- To what extent does the public have a say on government policy?
- What is the best way of enhancing the accessibility of primary healthcare using eHealth applications?
- To what extent does digital healthcare enhance self-reliance? When is it feasible, and under what conditions does it work, or fail?
- How can regional learning networks help keep healthcare accessible and affordable?

Nivel offers expertise, practical application of knowledge and advice and training for independent research, research involving patients, clients and the general public, and the analysis and interpretation of data, at both national and international level.

We publish the results of our academic healthcare research in renowned national and international journals and in the scientific media. Our experts can orientate themselves quickly, and on an interdisciplinary basis, to your questions concerning data and research methods relating to sustainable healthcare.





'Our studies respond to questions that matter to society, and the results can be directly applied in policy and practice'

Prof. Cordula Wagner, Chair, Nivel Executive Board



## The four societal challenges



Being healthy and staying healthy



Towards an inclusive society



The healthcare professional of the future



Sustainable healthcare

The Nivel research institute provides knowledge to address complex policy and practical questions concerning the structure and operation of the healthcare sector, participation in society and a sustainable healthcare system.



If you are interested in helping to develop and share knowledge on healthcare and social services, please contact us.

## Nivel

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