

WHO/Europe Subregional Network for Northern Europe meeting

# Enhancing Health and Care Workforce Collaborations

23–25 September 2024, Halmstad, Sweden

World Health Organization
European Region

Socialstyrelsen
THE NATIONAL BOARD OF HEALTH AND WELFARE

Region Halland

Republic of Estonia
Ministry of Social Affairs

# Enhancing Health and Care Workforce Collaborations

## WHO/Europe, the Swedish National Board of Health and Welfare (Socialstyrelsen), Region Halland, and the Estonian Ministry of Social Affairs are organizing the first meeting of the Subregional Network for Northern Europe, which will focus on health and care workforce issues.

The Network has been formed in light of the fact that many northern European countries share similar challenges that impact health and care workforce planning, including vast geographical regions with sparse populations alongside urbanized areas with a younger demographic.

As the needs of patients in these countries have evolved and increased, so has the need to develop the health and care sectors in response. Having sufficient numbers of health and care workers with the right mix of skills is key, which is why many of these countries have created data-driven decision-making systems to enhance their workforce planning and to tackle workforce shortages.

By exchanging experiences on their workforce planning models and through collaborative efforts, participants of the Network hope to address their health and care workforce challenges. At the same time, they will be collectively contributing to implementation of the WHO/Europe Framework for Action on the Health and Care Workforce 2023–2030 (unanimously adopted by all 53 Member States), in which retention and recruitment, and workforce planning are 2 key pillars.

**Objectives of the meeting**

Participants will focus on the following objectives:

- building a peer-learning network for the integration of workforce planning for the development of the health and care sectors;
- sharing good practices on how to build purposeful, information-driven planning models;
- developing more comprehensive comparative development analyses of workforce planning models that can consider differences in governance models;
- developing a common understanding of what data-driven analysis and decision-making may include to drive systematic changes, as well as the opportunities and limitations; and
- learning from the practical example of Region Halland, Sweden, which is using information-driven decision-making to support workforce planning.

This is the first in a planned series of meetings designed to enhance the health and care workforce of northern European countries through innovative approaches.

# Information drivenness in Halland

## Region Halland is rated one of the best in the country for healthcare quality and accessibility and is also home to the concept of information-driven care.

### Making a difference with information-driven care

Swedish healthcare is government-funded and universal meaning that it is available to all citizens via taxation, but also administratively decentralized. Medical services and healthcare systems are managed at the regional level, by 21 separate county councils across Sweden.

Region Halland, located on Sweden's southwestern coast, is rated one of the best in the country for healthcare quality and accessibility, especially for an increasingly older population with accumulated chronic health conditions. Region Halland is also home to the concept of information-driven care.

### What is information-driven care?

Information-driven care is an approach to health care that leverages the rapid integration of digital technology throughout society which enables preventive and precise actions. It uses data and state-of-the art analytics to create value across several disciplines and areas. It is used to provide the right care to the right person at the right time – as an example of precision medicine. Information-driven care encourages working closely with other institutions and organizations and across sectors spanning medicine, healthcare delivery, law, health economics, AI, IT, management and leadership. Trans-sectorial learning is a goal in itself.

### Region Halland's ecosystem of healthcare innovation

Region Halland is found on the cutting edge of the Swedish public healthcare sector, where it creates new opportunities and challenges old paradigms through collaborations with universities, other healthcare providers and national authorities. This also enables bridging some of the decentralization and helps increase the speed of development in healthcare through alliances.

The healthcare systems and providers of tomorrow are challenged by a chronic disease burden, the silver tsunami and work force shortages and burnout. In order to work smarter and more aligned with coming challenges, Region Halland's teams explore how to efficiently analyze its data collected from its array of IT systems including electronic health records. Working together with international researchers, methods that include using artificial intelligence are used to identify important actionable patterns in patient data.

Through its extensive digitalization, Region Halland can safely and continuously take the data collected at each healthcare visit and use it for the benefit of the patient. The Region Halland teams are exploring a variety of different methods and AI-techniques, including multimodal analysis, synthetic data generation, federated learning, and the use of large language models.

Healthcare innovation requires oversight and the data and systems of Region Halland are safe and secure. Public confidence and trust are vital to Region Hallands mission and commitment to its inhabitants, and great efforts are made to ensure that all technical, ethical, and legal standards are met.

Information-driven care has with time resulted in effects on the workforce, and at the organisational level. The adoption of information drivenness is highly influenced by the governance structure and facilitated by the relatively small size of the region and the close proximity to, and between, its decision-makers. The adoption also motivates and drives development towards reaping the benefits of an integrated care organisation.

**The effects of information-driven care**

The effects of information-driven care – an overall information drivenness, also outside the healthcare sector – will be demonstrated by presenting clinical and organizational cases where lives are saved, patient suffering reduced, healthcare costs cut, conventional boundaries challenged, and professional identities transformed in concordance with developments and adoption of facilitating technologies and ways of working.



*Halland, situated on the west coast of Sweden is home to the concept of information-driven care.*

# Programme

## Monday September 23, 2024 Profil Hotels

**19.00–21.00 Informal meet and greet hosted by Socialstyrelsen, National Board of Health and Welfare**

**19:10–19:20 Arriving in Halland**

- Ann-Mari Bartholdsson, Head of Regional Development

---

## Tuesday September 24, 2024 Fullriggaren, Halland County Hospital

- Moderator and organizing committee member: Helena Linge

**8.00–8.25 Welcoming remarks**

- Mikaela Waltersson, Chair of the Regional Executive Board, County of Halland
- Krister Björkegren, Regional Executive Officer, County of Halland
- Dr Björn Eriksson, Director General, National Board of Health and Welfare, Sweden
- Dr Natasha Azzopardi Muscat, Director, Country Health Policies and Systems (CPS), WHO Regional Office for Europe
- Dr Tomas Zapata, Regional Advisor, Health Workforce and Service Delivery, WHO Regional Office for Europe

**Fact-based ways of working in the digitalized era -quality, resources and workforce planning in the healthcare system in Halland-**

---

**8.25–9.05 Today's topic and examples of information drivenness**

- Markus Lingman, MD, adj prof, Chief Strategy Officer Region Halland

---

**9.05–9.30 Health care leadership perspectives**

- Carolina Samuelsson, MD PhD Director of the Halland Network of Hospitals
- Emma Pihl, R.N. PhD, Head of Primary Care Halland

---

**9.30–9.45 Dashboards: The business intelligence of work and workforce planning**

- Per Johansson, R.N. Head of Finance in the Halland Network of Hospitals

---

**9.45–10.00 Q&A First session**

---

**10.00-10.30 COFFEE**

***Group 1:*** **In plenum session Fullriggaren**

**10.30–10.50 Workforce and organizational needs.**

- Magnus Clarin, PhD Head of Research and Education, Region Halland

**10.50–12.00 Multi-tier collaboration with academia. Halmstad University:**

- Petra Svedberg, R.N. Professor of Nursing, Jens Nygren Professor of Health Innovation, Farzaneh Etminani Associate Professor Machine Learning

**12.00–12.30 HR, workforce and talent recruitment and containment.**

- Indre Grimpe, Director of Human Resources Region Halland

---

***Group 2:*** **Applications, real-world implementation and effects Kattegatt, Barken-Briggen**

**10.30–11.30 Demos and poster session of applications Halmstad University and Region Halland**

**11:30–12.30 Hospital site visits**

- PCI lab. Johan Pontén, MD
- Emergency room and ambulance tour. Carina Månsson, R.N., Head of unit
  Åsa Clarelid, Head of Unit, Sanna Larsson, Ambulance nurse

---

**12.30–13.15 LUNCH**

---

***Group 1:*** **Applications, real-world implementation and effects Kattegatt, Barken-Briggen**

**13.15–14.15 Demos and poster sessions of applications Halmstad University and Region Halland**

**14.15–15.15 Hospital site visits**

- PCI lab. Johan Pontén, MD
- Emergency room and ambulance tour. Carina Månsson, R.N., Head of unit
  Åsa Clarelid, Head of Unit, Sanna Larsson, Ambulance nurse

---

***Group 2:*** **In plenum session Fullriggaren**

**13.15–13.35 Workforce and organizational needs.**

- Magnus Clarin, PhD Head of Research and Education, Region Halland

**13.35–14.45 Multi-tier collaboration with academia. Halmstad University:**

- Petra Svedberg, R.N. Professor of Nursing, Jens Nygren Professor of Health Innovation, Farzaneh Etminani Associate Professor Machine Learning

**14.45–15.15 HR, workforce and talent recruitment and containment.**

- Indre Grimpe, Director of Human Resources Region Halland

**15.15–15.50 COFFEE and group photo Fullriggaren**

---

**15.50–17.00 Sharing and reflection; contributions from delegates**

- Moderator: Carolina Samuelsson, MD PhD Director of the Halland Network of Hospitals

---

**15:50–15:55 A Halland outline view of some of challenges and opportunities regarding information drivenness, innovation, AI implications at the regional level**

**15:55–16:25 Delegates group engagement- reflections in respective contexts.**

**16:30–16:55 Groups present back in plenum**

**16:55–17:00 Finalizing the session**

---

**17.00–18.00 BREAK**

---

**18.00–19.00 Pre-dinner showcase of ecosystem**
(walk starts at Profil hotels, led by business network representative)

---

**19.30–21.30 DINNER hosted by County of Halland (Profil hotels)**

---

## Wednesday September 25, 2024 Fullriggaren, Halland County Hospital

**9.00–9.20 Recap of the previous day**

- Cris Scotter, HRH Policy Advisor, WHO Regional Office for Europe

---

**9.20–10.50 Innovations in integrated workforce planning**

Examples from Halland and other Member State-nominated HRH focal points with Q&A

- Åsa Olsson, Programme Officer, Swedish National Board of Health and Welfare
- Professor Alison Leary, Chair of Healthcare and Workforce Modelling at London Southbank University
- Cris Scotter, HRH Policy Advisor, WHO Regional Office for Europe

---

**10.50-11.20 COFFEE**

---

**11:20–12:20 What does innovation mean to you?**

- Moderator: Cris Scotter, HRH Policy Advisor, WHO Regional Office for Europe
- Breda Rafter, Principal Officer, Strategic Workforce Planning Unit, Department of Health, Ireland
- Isabella de Wit, Head of Capacity Building and Recruitment Strategy, Health Workforce Directorate, Scottish Government

**12.20–13.05 LUNCH**

---

**13.05–13.50 Innovation in the wider health system – horizon scanning and implications for HRH**

- Moredreck Chibi, Technical Officer for Public Health Innovation, Special Initiative on Noncommunicable Diseases and Innovation (SNI), WHO Regional Office for Europe
- Helen Caton-Peters, Technical Officer for Digital Health, Country Health Policies and Systems (CPS), WHO Regional Office for Europe

---

**13.50–14.05 COFFEE**

---

**14:05–15:50 How to foster innovation – A perspective from Estonia**

**Information systems, processes and beyond**

- Moderator: Åsa Olsson, Programme Officer, Swedish National Board of Health and Welfare
- Katre Koppel, Head of Human Resources for Health, Ministry of Social Affairs Republic of Estonia (via link)

---

**15:50–16.20 Closing session: Introduction of the 2025 meeting**

- Åsa Olsson, Program Officer, Swedish National Board of Health and Welfare and Cris Scotter, HRH Policy Advisor, WHO Regional Office for Europe

---

**16:20–16:30 Formal thank you**

- Johanna Wiechel Steier, Director of Communications, Region Halland
- Cris Scotter, HRH Policy Advisor, WHO Regional Office for Europe

---

**16.30–18.00 BREAK**

---

**18.00–19.00 Informal farewell reception Profil Hotel**

---

# Demonstrations

**Title: Heart Failure: From Data to Action**

- Miltiadis Triantafyllou M.D., Consultant, cardiology

**Title: Dashboards - data to generate insights on a daily basis**

- Per A Andersson Controller

**Title: An information-driven approach to improving unscheduled care in an integrated care system A collaborative approach across silos**

- Susanne Sävenfalk Persson, Quality Management and Development

**Title: Automated Learnable Medical Assistant (ALMA)- a Digital Colleague in Healthcare**

- Louise Pettersson M.D., PhD, Strategist, senior physician
- Magnus Garell M.D. Chief medical officer, Primary care

# Posters

**Title: Three-Dimensional Data and Individual Variables: A Step Towards More Accurate and Personalised Diagnosis**

- Ellen Tolestam Heyman M.D., Resident physician, Emergency Medicine

**Title: Evolving Professional Roles in Tomorrow's Healthcare: Shifts in an Information-Driven Environment**

- Lena Petersson PhD, senior Lecturer

**Title: AI in Healthcare: Navigating the Path to Responsible Innovation**

- Amira Soliman PhD, senior Lecturer

**Title: Promoting Sustainable Work-Life: First-Line Managers' Experiences in Healthcare Organizations**

- Anna Marzelius RN. Head of Unit, Surgery and ICU
- Ingrid Larsson PhD, Professor in health and lifestyle

**Title: Improved Wound Care Processes: A Multidisciplinary Research Collaboration**

- Jens Lundström, PhD lecturer in Information Technology
- Ingrid Larsson Professor in health and lifestyle

**Title: Strengthening research competences in Industrial and public healthcare sector through a National Research School in Health Innovation.**

- Lina Lundgren PhD, associate professor of Health Technology

**Title: Accelerating Information Driven Care: The Impact of CAISR Health's co-production model with Academia, Industry, and Regional Partners**

- Jens Lundström PhD lecturer in Information Technology

**Title: Digitalization in Home Healthcare - Balancing Innovation with Workforce Well-being**

- Sara Karnehed R.N., doctoral candidate

---

# Site visits

**PCI lab.**

- Johan Pontén M.D.

**Emergency room and ambulance tour. Carina Månsson, R.N., Head of unit**

- Åsa Clarelid, Sanna Larsson

# Participants

## Representatives from WHO

***Tomas Zapata***
Regional Advisor, Health Workforce and Service Delivery, Division of Country Health Policies and Systems

***Moredreck Chibi***
Regional Public Health Innovation Lead, Special Initiative on NCDs and Innovation

***Helen Caton-Peters***
Technical Officer, Data and Digital Health, Division of Country Health Policies and Systems

***Cris Scotter****
Policy Advisor, Health Workforce and Service Delivery, Division of Country Health Policies and Systems

***Graeme Chisholm****
Programme Support, Health Workforce and Service Delivery, Division of Country Health Policies and Systems

## Representatives from WHO Member States

***Ebe Sarapuu***
Department Manager, Department of Healthcare Management, Estonia

***Katre Koppel****
Head of Human Resources for Health, Ministry of Social Affairs, Estonia

***Tia-Maria Kirkonpelto***
Senior Specialist, Ministry of Social Affairs and Health, Department for Clients and Services in Healthcare and Social Welfare, Finland

***Martin Hønge Olsen***
Programme Manager, Ministry of Health, Greenland

***Pierre Vassard***
Chief Financial Officer of the Greenlandic Health Care Services, Greenland

***Dagmar Huld Matthíasdóttir***
Senior Advisor, Ministry of Health, Iceland

***Breda Rafter***
Breda Rafter Principal Officer, Strategic Workforce Planning Unit, Department of Health, Ireland

***Martha Purcell***
Martha Purcell Assistant Principal, Strategic Workforce Planning Unit, Department of Health, Ireland

***Eglė Savulienė***
Head of Specialist Activities Division of State Accreditation Authority for Health Care, Lithuania

***Diana Smaliukaitė***
Head, Health Workforce Policy Division. Ministry of Health, Lithuania

***Christin Ormhaug***
Health Workforce Planning, Norwegian Directorate of Health, Norway

***Erik Sirnes***
Senior advisor, The Department of Specialist Health Care Services, Section for Competence, Research and Innovation, Norway

***Espen Vattekar***
Senior advisor, Norwegian Directorate of Health, Norway

***Tone Hee Aaker***
Senior Advisor, Department of Competence, Norway

***Alan Milbourne***
Digital Skills and Leadership Policy Manager, Scottish Government, Scotland

***Isabella de Wit***
Head of Capacity Building and Recruitment Strategy, Scottish Government, Scotland

***Alison Leary***
Chair of Healthcare and Workforce Modelling London Southbank University, UK

***Phil Harper***
Deputy Director, Professional Standards and International Workforce, Department of Health and Social Care, UK

## Representatives from Government Offices of Sweden

***Ellinor Östensson***
Ministry of Health and Social Affairs, Departmental secretary, Government Offices

## Representatives from National Board of Health and Welfare (Socialstyrelsen)

***Mattias Fredricson***
Head of Department for Development of Healthcare at System Level

***Lena Hellberg***
Head of Unit, Division for Access to Health Care Services and Work Force Planning

***Åsa Olsson****
Programme officer

***Anna Dahlin***
Assessor

***Katarina Fredriksson***
PhD, Program officer

***Fredrik Bergenfeldt***
Program officer

***Helena Asp***
Programme officer

***Jesper Sellerberg***
Programme officer

***Karin Dunér Lindqvist***
Programme officer

***Christina Straat***
Programme officer

***Christine Sandheimer***
Program officer

***Maria Berg***
Programme officer

***Richard Forsén***
Programme officer

***Sofia Leijon***
Programme officer

***Louise Pikner***
Administrator

***Malin Nylén Bolinder***
Office manager

## Representatives from Region Halland

***Mikaela Waltersson***
Chair of the Regional Executive Board, County of Halland

***Krister Björkegren***
Regional Executive Officer, County of Halland

***Carolina Samuelsson***
M.D., PhD, Director Halland Network of Hospitals

***Emma Pihl***
R.N. PhD, Director of Primary Care

***Indre Grimpe***
Director of Human Resources

***Magnus Clarin****
PhD, Head of Research and Education

***Per Johansson***
R.N. Head of Finances, Halland Network of Hospitals

***Markus Lingman****
M.D., PhD, Chief Strategy Officer, professor, cardiologist

***Magnus Garell***
M.D. Chief medical officer, Primary care

***Helena Linge****
PhD, Strategist, associate professor

***Helen Andersson****
R.N. PhD, Strategist

***Louise Pettersson***
M.D., PhD, Strategist, senior physician

***Anna Marzelius***
R.N. Head of Unit, Surgery and ICU

***Ellen Tolestam Heyman***
M.D., Resident physician, Emergency Medicine

***Miltiadis Triantafyllou***
M.D., Consultant, cardiology

***Ann-Caroline Holst***
R.N. PhD Strategist

***Susanne Sävenfalk Persson***
Quality Management and Development

***Hanna Jönsson***
Quality Management and Development

***Susan Johansson***
Quality Management and Development

***Ann-Mari Bartholdsson***
Head of Regional Development

***Per Andersson***
Controller

***Maria Andersson****
Coordinator

****organizational committee members***

---

## Representatives from Halmstad University

***Jens Nygren***
PhD, Professor of Health Innovation

***Ingrid Larsson***
PhD, Professor in health and lifestyle

***Petra Svedberg***
R.N. PhD Professor of Nursing

***Lena Petersson***
PhD, senior Lecturer (Pedagogy; Working Environment Technology)

***Lina Lundgren***
PhD, associate professor of Health Technology

***Jens Lundström***
PhD lecturer in Information Technology

***Amira Soliman***
PhD, assistant professor

***Sara Karnehed***
R.N., doctoral candidate

***Farzaneh Etminani***
PhD, Strategist, associate professor

---

## Representatives from other Swedish Regions

***Anders Kullbratt***
Acting Director of Health and Health Care Development. Deputy Director NU, Västra Götalandsregionen

***Peter Häyhänen***
Director of Health Care Development, Learning & Innovation, Region Jönköping

***Anders Näslid***
Head of department Leadership and operational development Region Jönköping

***Britt-Marie Zaman***
Head of Digitalization, Sahlgrenska University Hospital

***Alexander Büller***
Head of IT, Sahlgrenska University Hospital

***Gustav Eklöf***
Senior healthcare analyst, Region Dalarna

---

## *With thanks for special efforts*

***Malin Amaro Löfgren, Emelie Widarsson***
Region Halland

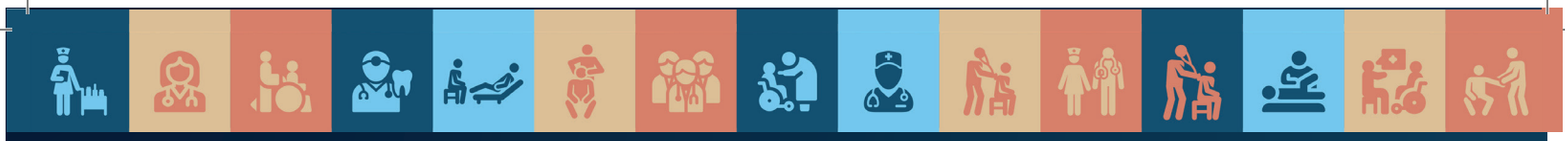
***Katarina Andersson***
Swedish National Board of Health and Welfare

***Nicholas Fry***
WHO

***Communications teams***
WHO, Swedish National Board of Health and Welfare, Region Halland

***Service team Region Halland***

***Networks and partners contributing to the program***



World Health Organization
European Region

Socialstyrelsen
THE NATIONAL BOARD OF HEALTH AND WELFARE

Region Halland

Republic of Estonia
Ministry of Social Affairs