



NORWEGIAN MINISTRY
OF HEALTH AND CARE SERVICES

The Barents Programme on New Technology and Methods in Health Care in sparsely populated areas - assessment "Barometer of digital transformation for citizens with chronic diseases".

JWGHS meeting, On-line, 19 November, 2020

Dr.Zaza Tsereteli, MD, MPH – Senior Advisor
Ministry of Health and Care Services, Norway

Programme Coordinator

The development of the Barents Programme on *New Technology and Methods in Health Care in sparsely populated areas* was commissioned by the Joint Working Group on Health and Related Social Issues (JWGHS) and adopted in 2019 together with the 6th Framework Programme in Health and Related Social Issues in the Barents Euro-Arctic Region 2020- 2023.

Programme Aim

A) Collecting and exchanging information and knowledge on best practices of cost-effective solutions to meet unmet health care needs in rural areas,

B) Sharing of models (modules) for introduction of health information technology (HIT) in different fields of the health and care systems, including exchanging personnel training and education

Digital health defined in terms of type and use of digital technologies.

- “Digital Health is a term that is frequently adopted to encompass a wide range of technologies related to health and medicine” (Lupton, 2014).
- Similarly, “digital health refers to the use of information technology/electronic communication tools, services, and processes to deliver health care services” (Canada Health Infoway, 2020).
- Finally, the WHO definition of digital health is a “broad umbrella term encompassing eHealth (mHealth), as well as emerging areas such as [the] use of advanced computing sciences in ‘big data’, genomics, and artificial intelligence.”

Digital health

- Digital health involves a broad variety of technologies and tactics to deliver virtual health, medical care and education services outside of traditional healthcare facilities. It allows long-distance delivery and facilitation of clinical and non-clinical applications to enhance care, education delivery, administration and research

Regions Covered by the Assessment

- Healtse Nord (Nordland, Troms and Finnmark counties - 480 000 inhabitant)
- Västerbotten - 270 000 inhabitant
- Norbotten Region - 250 000 inhabitant
- Arkhangelsk Region - 1 092 424 inhabitant
- Nenets Autonomous Oblast – 44 100 inhabitant
- Murmansk Region - 741 400 inhabitant
- North Karelia - 164 465 inhabitants
- Lapland Region
- Republic Karelia – 614 100 inhabitant
- Republic Komi – 830 235 inhabitant

Which solutions or services do you already provide or plan for the next period

- Mobile health (M Health)
- Distance meetings (This refers to all kinds of meetings, both between professions and between citizens and professions)
- Provide training and medical staff education
- Remote patient Monitoring (This refers to sensors, cameras, reminders and data collection.)
- Live (synchronous) Video consultation
- Patient education

What chronicle diseases/patient groups can be offered self-monitoring or self - treatment

- Diabetes and asthma, overweight, hypertension
- The region has a pilot project with self-monitoring services for patients with heart failure (Vasterbotten and Norboten)
- My Path - is a digital service portal, where patient can get care and support at any time. There are self-care programmes for all citizens and digital care paths dedicated to spesific disease groups. 15 digital care pathways for different patient groups, and about 15-20 in under process (Oulu University)
- In particular, pulse oximetry, measurement of blood pressure, blood sugar, ECG recording and recording the results in special applications (for example, an electronic diabetic diary) are carried out (Pilot in Nenets AO)

What are the main challenges regarding the provision of telehealth services in our Regions

- The technical foundations for telehealth were already available in the Nordic Countries of the Barents Region before COVID19
- Lesson 1
- The type of telehealth services used has shifted since the coronavirus outbreak

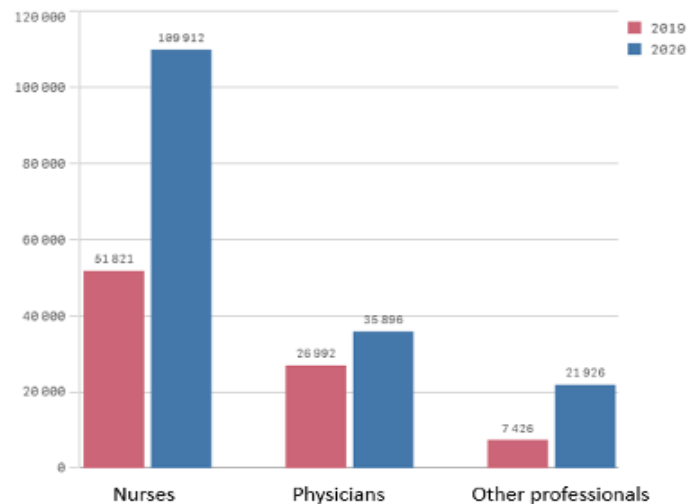
Who led the digital transformation of your company?

A) CEO

B) CTO

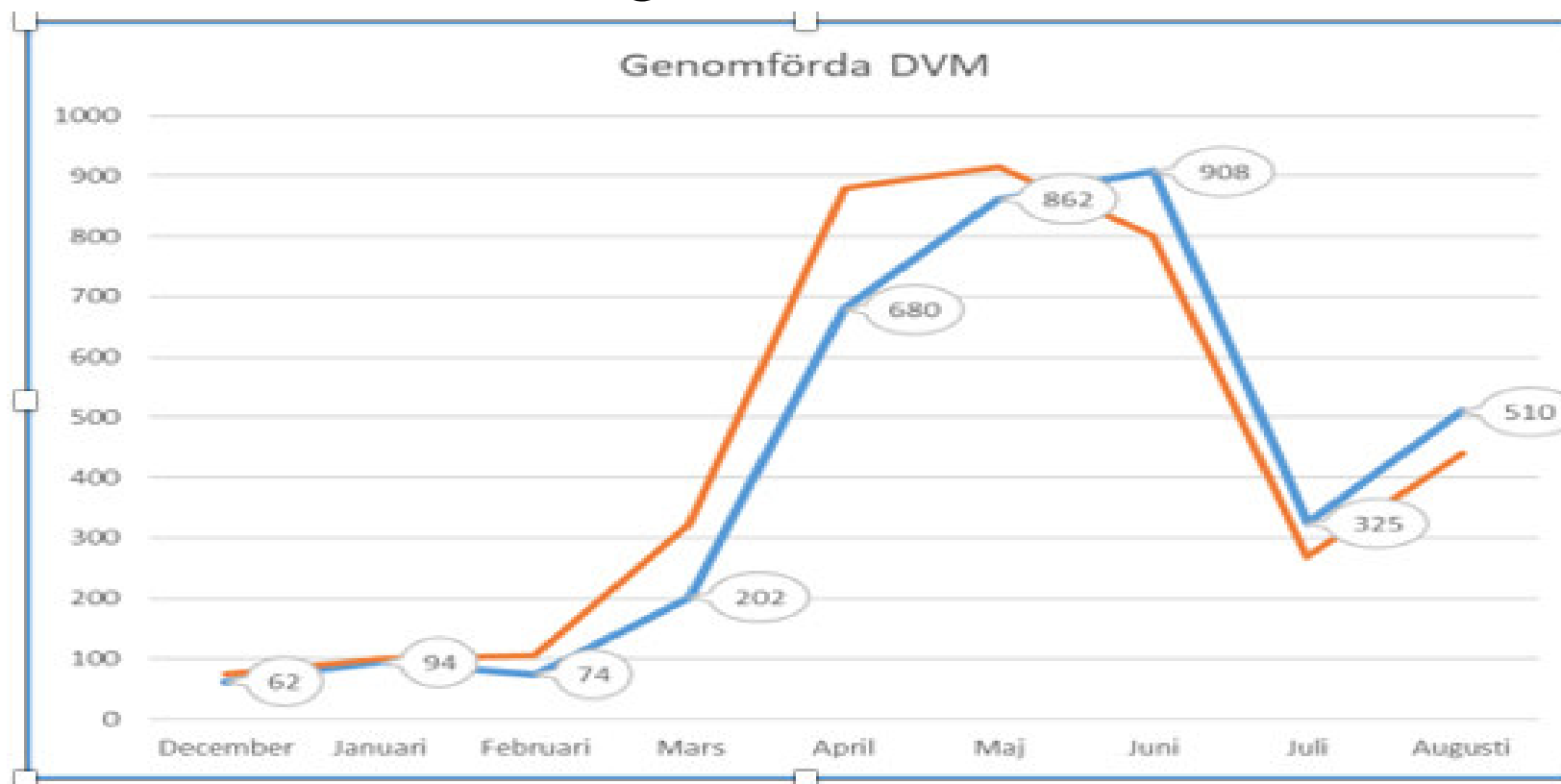
C) COVID-19

Joint municipal authority for North Karelia social and health services



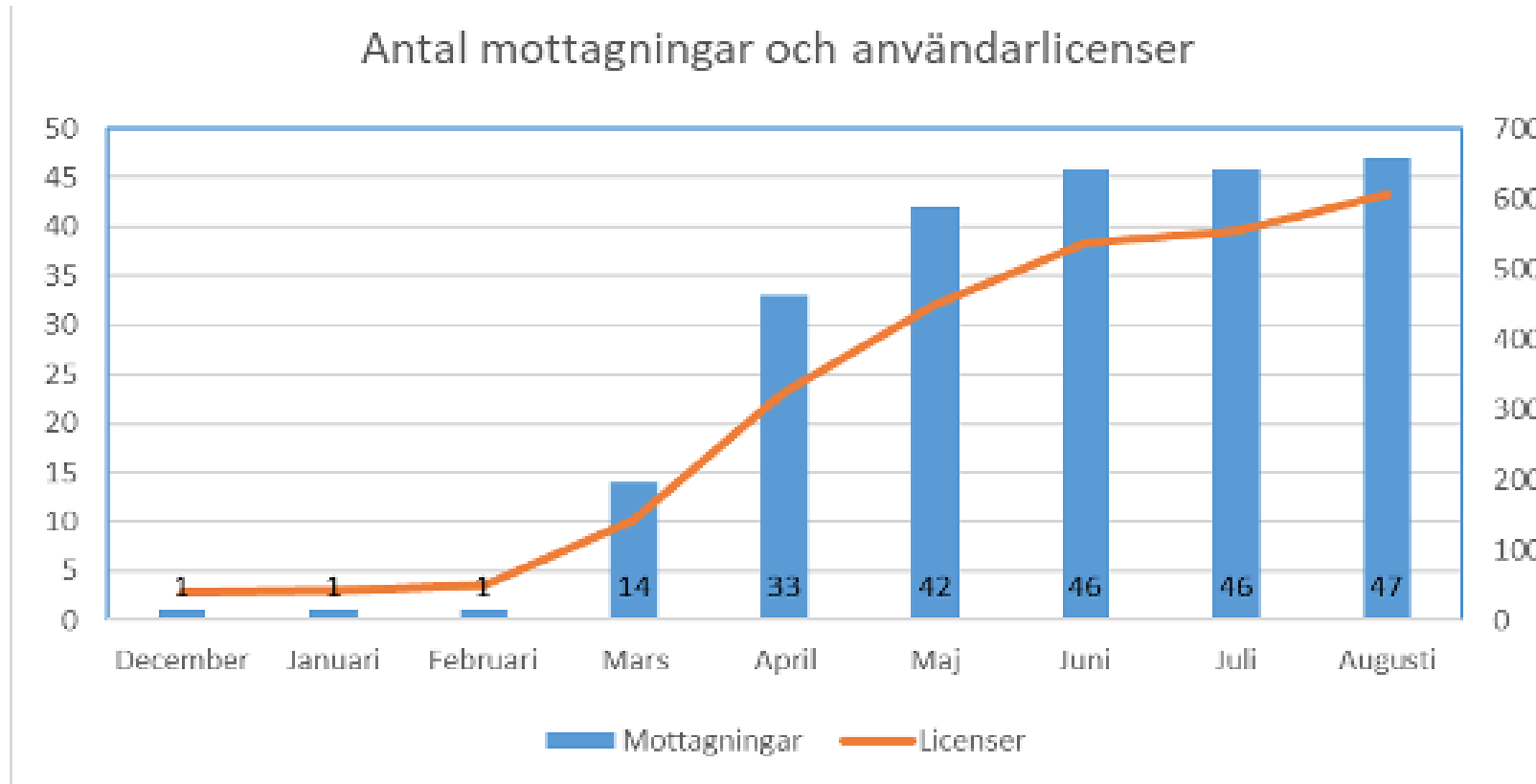
Especially psychiatry increased 71 % its distant spanning services, but also general medicine (ordinary primary care services) increased 61 % remotely given services compared data available from January to end of August both 2019 and 2020 respectively. These figures include all remote contacts from service units to patients.

Västerbotten Region



number of digital meetings for medical care (DVM) (red for women and blue for men)

Antal mottagningar och användarlicenser



how many receptions at hospitals and primary health care together, that have a license for digital meetings with patients

- The total number of telemedicine consultations increased by 1547 (from March to August 2019 - 1675, from March to August 2020 - 3222) – Murmansk Region
- For diseases of the cardiovascular system, traumatology, oncology, radiology, neurology. The number of consultations increased by 30% - Nenets AO
- Telemedicine technologies are most often used for decoding ECG. Before the pandemic, 1233 consultations were held (of which 1128 were ECG decoding), after the pandemic - 1951 (of which 1826 were ECG decoding). - Komi

Main challenges

- Lesson 2
- Proper funding, better regulations and interoperability are needed
- Lesson 3
- Digitalhealth usage shifts from chronic conditions towards more regular (first touch point) use cases
- Lesson 4
- The target audience is not restricted to the elderly or the digital natives, it can be for everyone

Key requirements of digital health systems

- Reimbursement models that incentivize outcomes, not transactions.
- Care delivery processes and pathways that prioritize health and wellness.
- Data that is secure, private, and used to proactively identify risk and track outcomes to inform care decisions.

Challenges for Governance in Digital Health Systems

- As digital health evolves, leaders can expect to experience employee and professional pushback as digital competencies are required, clinician roles change, and there is lack of appropriate organization and system-wide digital health strategy.
- there is a lack of expertise or experience in digital leadership, there is rigid organizational structures and policy settings, or where traditional funding models are used that are not equipped to manage health in a digital society.
- A clear and well-defined digital health strategy focused on transformation of care requires new governance structures and tools to support and incentivize progress toward a robust digital health system.

Digital Health Governance



- Patients need to be included as partners and informed about health technologies, with a focus on how access and use of such technologies must be considered to support vulnerable populations.
- The healthcare workforce requires expertise and guidance to evaluate new technologies, using processes grounded in real-world evidence.

Digital Health

- Digital health is emerging as a priority for many public and private healthcare systems as a way forward to drive value for every global citizen, to ensure healthcare is accessible and equitable, and high performing

- **Thank you for your attention**

- E-mail: zaza.tsereteli@hod.dep.no