

## Commentary

# Telemedicine & e-Health in the Russian Arctic

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Telemedicine and e-health services are successfully used in the Arctic regions all over the world (Woldaregay et al., 2017). Very long distances and problems of availability of medical services have created the need for wide use of distance technologies and e-health solutions.

Telemedicine in Arctic Russia was introduced in the 1990s. The first Arctic telemedicine network was established with efforts of an enthusiastic team in Arkhangelsk oblast in 1997 (Sorensen et al., 1999). The first network was organized in the framework of international co-operation projects and with the support of the Norwegian Center on Telemedicine (NST) based in Tromsø, Norway (Bye & Manankov, 2007). It became clear that trained staff and quality of communication lines were the main instruments of telemedicine distribution and development.

Now telemedicine is widely used as a complementary service in most Arctic regions of Russia, such as Arkhangelsk oblast, Nenets Autonomous Okrug (NAO), Yamal-Nenets Autonomous Okrug, Taymir, Yakutia (Sakha) and Chukotka. It is mostly used in sparsely populated areas, where the distances are quite long and delivery of health services is difficult. The most active use of telemedicine is developing in the Nenets Autonomous Okrug. For example, in NAO, 17 health centers are connected to a disperse telemedicine network. Teleconsultations with Nenets Okrug Hospital and external hospitals are occurring every day with real results and high economic effect. This was one of the reasons why Naryan-Mar hosted two international conferences on Arctic Telemedicine in 2014 and 2016 (see Arctic Telemedicine). The Conference participants from many Russian Arctic areas and guests from other parts of the world demonstrated a wide spectrum of different telemedicine and e-health solutions for Arctic needs.

The telemedicine used in Arkhangelsk oblast and NAO cover the different distant diagnostic possibilities including traditional needs of cardiology, surgery, neonatology, distant ECG, X-Ray and even telepsychiatry.

A new bill on telemedicine was introduced in Russia in 2017 (Muravin, 2017). It will allow the patients to legally obtain remote consultations from doctors on the Internet. The newly introduced bill provides a legal framework for use of information and telecommunication technologies in health care. The bill regulates all the telemedicine activities, including: distant

visits to a healthcare practitioner followed by the issue of patient assessment reports and treatment advice, distant case conferences, e-prescriptions, using telemetric data, maintaining patients e-records and information exchange.

## References

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