Barriers to AI Adoption in the Nordic Health Sector

Background

The Nordic states frame advances and adoption of AI as vital in addressing a broad range of critical health sector challenges. AI technologies are seen as the best, and often only means, to increase efficiency, reduce costs, improve patient care and address staffing crises. The Nordic health sector is considered a prime target for AI adoption. Yet AI's impact in the sector remains limited, and the barriers causing this are little understood.

This brief summarises and compares the barriers faced by the Nordic states in adoption of AI in their health sectors. It compiles data from the World Health Organization's (2025) report Artificial intelligence is reshaping health systems: state of readiness across the WHO European Region.

Key Findings from the Nordic Region

- **Infrastructure limitations are the region's greatest shared barrier** to AI adoption in the health sector.
- **Financial affordability is a serious barrier to AI adoption**. This contrasts with the claims of the Nordic states that AI can radically reduce healthcare costs.
- **Legal uncertainty and incompatible product approval processes** remain a challenge. Only Norway has legislative measures or provisions for governance and oversight of AI in the health sector. Robust regulation and oversight across the Nordics are needed.
- **Limited evidence on the benefits or harms of AI hampers adoption** (except for Denmark). Independent scientific research and transparency of AI systems are vital for further adoption. This should include research exploring if AI is even the most viable option to use (what we call Question Zero).
- **Environmental impacts and job displacement are only minimal concerns.** This is despite considerable evidence showing AI's impact on both areas. Environmental sustainability is a core principle of the WHO's Ethics and Governance of Artificial Intelligence for Health.
- **The Nordic states face very different challenges which limit AI adoption**. Sweden and Norway face the most barriers, Denmark and Finland the least. Given the differences, regional policies to increase AI adoption in the health sector may not be optimal.

Barriers for Adoption of AI in the Nordic Health Sector

		Denmark	Finland	Iceland	Norway	Sweden	Regional Barriers Ranked by Importance
Barrier to AI Adoption	Infrastructure Limitations	Major	Major	Major	Moderate	Major	1
	Legal Uncertainty	Moderate	Moderate	Major	Major	Major	2
	Product Approval Processes	Moderate	Moderate	Major	Major	Major	2
	Financial Affordability	Major	Moderate	Major	Moderate	Major	2
	Insufficient Evidence	Minor	Moderate	Moderate	Major	Major	3
	Data Quality/ Standards Issues	Minor	Minor	Moderate	Major	Major	4
	Strategy Barrier	Minor	Moderate	Major	Minor	Major	4
	Capacity & Skills Gap	Moderate	Moderate	Moderate	Major	Major	4
	Lack of Trust	Moderate	Minor	Minor	Major	Moderate	5
	Cultural Barriers	Moderate	Minor	Minor	Moderate	Moderate	6
	Environmental Concerns	Minor	Minor	None	Moderate	Moderate	7
	Job displacement concerns	Minor	Minor	None	Moderate	Minor	8
Ranked by Least Barriers		**1**	**1**	**2**	**3**	**4**	

(Source WHO, 2025)

Additional Resources

Carli, R., et al. (2025). Self-Assessment Tool with Guiding Questions for Responsible AI Approach by AI Policy Lab (AIPL). Test version 2 from November 11, 2025.

Tucker, J. (2023). The future vision (s) of AI health in the Nordics: Comparing the national AI strategies. *Futures*, *149*, 103154.

Tucker, J. (2025). WHO and Artificial Intelligence; Contesting Global Health Futures Through Foresight, Frontiers of Public Health, 13:1659980.

WHO. (2021). Ethics and Governance of Artificial Intelligence for Health: WHO Guidance

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