EFN Position Statement on Nurses Co-Designing Artificial Intelligence Tools

Artificial Intelligence (AI)[1] is increasingly affecting the functioning of our healthcare systems, as well as our citizens' expectations of these systems. The use of AI technologies to deliver care more cost-effectively represents an opportunity to relieve the currently strained healthcare systems – particularly in the context of the ongoing COVID-19 pandemic.

AI has the potential to improve nursing care – both from the nurses' and from the patients' point of view. AI tools could allow nurses to better accompany, support and empower patients in their planning and delivery of frontline care. In their daily practice, nurses could benefit from unlimited access to health information and records, and thanks to AI, they would also be able to easily analyse complex data. Well-designed and implemented AI does have the power to assist frontline nurses and decrease their workload in more "automatable" areas (e.g. administrative tasks), which, in turn, gives nurses more time for direct patient care, as well as to provide support through risk assessment.

However, the success of AI in Europe largely depends on end-users. These will only use AI tools if they are involved as co-designers of these technologies from the start, if they trust them and see their added value. In this context, co-design should be understood as the process by which end-users (i.e. frontline nurses) and the technical developers in charge of the new AI technology engage together in a process within which they continuously provide mutual feedback and exchange views, needs, expectations and thoughts. Such an approach will make sure that the outcomes and deliveries developed by the technicians will fit the purpose and address the needs of the nurses at the frontline of healthcare. It is of utmost importance that nurses have the right competences to deal with AI tools, and are, therefore, equipped with a set of necessary digital skills in order to maximise the positive impact of AI tools. Lifelong learning programmes focusing on digital literacy are, consequently, essential. Most importantly, ethical challenges linked to AI deployment in the healthcare sector need to be addressed through trust-building by 1. ensuring the privacy and other rights of persons whose data will be used or stored in these systems; 2. ensuring ethical access to high-

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[1] AI refers to the simulation of human intelligence in man-made machines programmed to imitate certain human actions as closely as technologically possible. The term may also apply to machines or software programmes that are capable of problem-solving and learning (Commission White Paper on AI, 2020).

quality and inclusive input data sets capable of producing accurate, generalisable and unbiased results; 3. ensuring ethical implementation of AI tools in all types of healthcare settings – hospital, home and long-term care.

Ethical issues need to be addressed through a co-design process with all relevant stakeholders. If all is ethically sound, AI has a strong potential to effectively drive change in the delivery of person-centred care.

Hence, the EFN, in the representation of its Membership, asks the European Commission, the European Parliament and the Council of Ministers to:

- Include nursing leaders and frontline nurses as end-users in the co-design of future EU legislation on AI;

- Place co-design with nurses at the centre of upcoming EU-funded projects on AI for healthcare;

- Raise awareness among the EU Member States on the key positioning of frontline nurses in the healthcare systems, as well as on the need to co-design with them the implementation of AI tools at the national and regional levels.

Further Readings

- European Commission. 2019. Ethics guidelines for trustworthy AI.
  https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai

- European Commission. 2020. White Paper on Artificial Intelligence - A European approach to excellence and trust.
  https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf

- Gille, Felix; Jobin, Anna; Ienca, Marcello. 2020. *"What we talk about when we talk about trust: Theory of trust for AI in healthcare"*. Intelligence-Based Medicine.

- Lam, Chervin; Mattson, Marifran. 2020. *"I would get real people involved-: The perspectives of end users in policymaking"*. Health Policy Open. Vol. 1. Elsevier.

- Li, Ron C.; Asch, Steven M.; Shah, Nigam H. 2020. *"Developing a delivery science for artificial intelligence in healthcare"*. Nature. Digital Medicine. Vol. 3. No. 107.