

NICA.

Digitalisation of Innovative Care Processes to Unburden and Empower Nurses

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DIGITAL TRANSFORMATION IN NURSING CARE

DIGITALIZATION IN NURSING: ENHANCING EFFICIENCY AND SHAPING FUTURE CARE

As part of the **NICA project— Digitalisation of Innovative Care Processes to Unburden and Empower Nurses** —a comprehensive online questionnaire was sent to nursing staff in hospitals, mobile care services, and long-term care facilities in German-speaking countries to systematically identify opportunities for digitalization in everyday nursing practice. A key finding: Nursing documentation is a significant time-consuming task and places a considerable burden on daily work.

Our conclusion: Digital solutions developed with a practical focus, supported by AI, and designed in collaboration with nursing staff can help reduce the burden of documentation, free up time for direct patient care, and thereby sustainably improve job satisfaction and the quality of care.

Insights and digitalization potential

Between April and October 2025, a total of 1,108 people participated in the survey - an exceptionally high number - that clearly reflects the great interest in and relevance of the topic within the professional group. The questionnaire consisted of 53 items and covered five key topics: Characteristics of the participants, general aspects of nursing

documentation, attitudes toward electronic documentation, perceived burden of documentation, and the integration of artificial intelligence into nursing care. The high participation rate provides an foundation for meaningful results and practical insights.

76% of participants predominantly document electronically; however, only 35% use digital decision-support tools. 66% perceive the

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documentation workload as too high relative to the time available. 79% experience duplicate documentation as an unnecessary burden, and more than half report that they sometimes do not finish their shifts on time due to outstanding documentation tasks.

At the same time, over 75% of participants attribute high importance to documentation for safety, continuity, and communication. The burden arises less from nursing-related content than from redundancies, technical limitations, and a lack of automation.

The results indicate a high level of acceptance for AI-supported solutions: over 80% of participants can envisage digital decision support in care planning, risk management, and discharge processes. In particular, there is demand for simplified care planning, speech-based tools, and better-integrated systems.

The N!CA program demonstrates that successful digitalisation in nursing can only be achieved in collaboration with nursing professionals. Their expertise is essential for developing technologies that genuinely reduce workload, enhance job satisfaction,

and sustainably improve the attractiveness of the nursing profession.

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Project partner

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- Althea gemeinnützige Pflegebetriebs GmbH, Österreich
- LOIDL Consulting & IT Services GmbH, Österreich
- CAATS, Österreich
- Predicting Health GmbH, Österreich
- Steiermärkische Krankenanstaltengesellschaft mbH, Österreich
- Treetop Medical GmbH, Wien Österreich
- Medizinische Universität Graz, Österreich
- Joanneum Research Forschungsgesellschaft mbH, Österreich
- FH Oberösterreich Forschungs & Entwicklungs GmbH; Österreich
- Umit Tirol – Private Universität für Gesundheitswissenschaften und –technologie mbH, Österreich
- Universität Wien, Österreich
- Vetterli, Roth & Partners, Schweiz

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