

Technology offer IP-009

MIDENF®: software for measuring nursing workloads and the efficient management of human resources

New nursing human resources management method based on the MIDENF® scale, which allows an objective measurement of nurses' workload in adult hospitalization units. Its implementation is necessary to assess nursing workload per shift and day, adjusting the nursing staff to the actual care demands of patients, improving quality of care and patient safety, reducing adverse events and complications for patients, and enhancing professional job satisfaction.



State of development

TRL-7 Real-world validation

Industrial Property

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Objective of the collaboration

License

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Market needs

Efficient management of nursing human resources remains a challenge in hospitals, as the lack of objective tools in inpatient units leads to imbalances in staff distribution and risks for patients. Current methods for managing nursing human resources are subjective and poorly standardized, creating a need for systems that allow an objective, reliable, and comprehensive assessment—including all four functions—of nursing workload to optimize patient safety, quality of care, clinical outcomes, and staff job satisfaction.



Technical solution from IMIB

The solution focuses on the MIDENF® scale, implemented through software that objectively quantifies nursing workload based on NIC interventions in adult patient units. The tool allows for the recording and analysis of nursing interventions, according to NIC terminology, across the four nursing functions—caregiving, managerial, teaching, and research—during each work shift. The system captures patient data and intervention times, identifying patterns of care demand with high accuracy and speed. Its application enables the measurement of nursing workload per shift and per day, allowing staffing levels to be adjusted to the actual care needs of patients. Multicenter validation in several hospitals has demonstrated its reliability and practical usefulness, facilitating human resource planning and improving the quality and safety of care.

Benefits

- Objective, more comprehensive, and precise measurement.
- Validated in hospitals with high reliability.
- Integrates the four nursing functions using standardized NIC terminology recognized internationally.
- Optimizes human resources and reduces costs.
- Improves quality of care and patient safety.
- Increases job satisfaction among nursing staff.