AI IMPACT REPORT NO. 142 · REVISED 5 OCTOBER 2026 · 250 ROLES COVERED

Registered Nurses

AI augmenting diagnostics, monitoring, and administrative tasks.

EXPOSURE	WINDOW	ADOPTION TODAY	READING
34 Moderate exposure	4–9 yrs until change lands	Medium	Augmented more than replaced. Exposure is the share of today's work AI can plausibly take on within the window.

§ 01 WHAT IS HAPPENING

What is happening to registered nurses

Impact

AI is being used for tasks like analyzing medical images, predicting patient deterioration, transcribing notes, managing schedules, and providing clinical decision support. It aims to reduce administrative burden and enhance diagnostic capabilities, allowing nurses to focus more on direct patient care and complex decision-making.

Risk

Significant augmentation of clinical support; core patient care and empathy remain human.

The RN role will be significantly augmented by AI tools that assist with data analysis, monitoring, and documentation. This will free up nurses from some routine tasks, enabling more time for direct patient interaction, complex care coordination, patient education, and emotional support. Critical thinking and clinical judgment in interpreting AI outputs will be key.

Sector readiness

Progressive Integration in Clinical & Admin Workflows

AI tools for clinical decision support, remote patient monitoring, and administrative automation are being increasingly piloted and adopted in healthcare settings. Ethical considerations, data privacy, and integration with existing systems are key factors.

§ 02 POSITION

Where you stand

i The Registered Nurse role will be significantly augmented by AI, especially in data analysis, monitoring, and administrative tasks, rather than being replaced.

ii AI tools will help reduce cognitive load and administrative burdens, allowing nurses to spend more time on direct patient care, complex decision-making, and empathetic interaction.

iii Proficiency in using and critically evaluating AI-driven clinical support tools, alongside strong clinical judgment and interpersonal skills, will be key for future success and effectiveness.

§ 03 ACTIONS 15 POINTS

What this means for you

Concrete changes to how the work gets done, in the order you are likely to meet them.

01 **AI-Powered Clinical Decision Support.** Utilize AI tools that analyze patient data (vitals, labs, history) to provide diagnostic suggestions, treatment recommendations, or alerts for potential adverse events.

02 **Remote Patient Monitoring with AI Analytics.** Use AI-enabled systems to monitor patients remotely (e.g., wearables, home sensors), identify trends, and receive alerts for patients requiring intervention.

03 **Automated Charting & Documentation.** Employ AI for voice-to-text transcription of notes, automated summarization of patient encounters, or intelligent data entry into Electronic Health Records (EHRs).

04 **Predictive Analytics for Patient Deterioration.** Work with AI systems that analyze real-time patient data to predict the likelihood of sepsis, cardiac arrest, or other critical events, enabling earlier intervention.

05 **Medication Management Assistance.** AI tools can help verify medication orders, check for drug interactions, or assist in managing complex medication schedules.

06 **Personalized Patient Education.** AI could help generate or tailor patient education materials based on their condition, learning style, or language.

07 **Streamlined Staff Scheduling & Resource Allocation.** AI can optimize nursing staff schedules based on patient acuity, staff availability, and workload balancing.

08 **Triage Assistance in Emergency Settings.** AI tools might assist in initial patient triage by analyzing symptoms and vital signs to help prioritize care (with human oversight).

09 **Enhanced Medical Image Analysis Support.** While radiologists are primary, nurses might interact with AI systems that pre-screen or highlight areas of concern in medical images (X-rays, CTs).

10 **Focus on Holistic Patient Care & Empathy.** With AI handling some data tasks, more time can be devoted to patient communication, emotional support, and addressing holistic care needs.

11 **Interpreting & Validating AI Insights.** A crucial skill will be to critically assess AI-generated information, understand its limitations, and integrate it with your clinical judgment.

12 **Ethical Application of AI in Patient Care.** Understanding and navigating the ethical implications of using AI, including data privacy, algorithmic bias, and patient consent.

13 **Collaboration with AI-Driven Robotics (Future).** Potential for AI-powered robots to assist with tasks like patient lifting, delivery of supplies, or basic monitoring, requiring nurses to interact with these systems.

14 **Contribution to AI Model Improvement.** Providing feedback on the performance and usability of AI clinical tools to help refine and improve them.

15 **Chronic Disease Management Support.** AI tools can help monitor patients with chronic conditions, track progress, and suggest interventions, with nurses managing the overall care plan.

§ 04 CAUSES 10 DRIVERS

What is pushing this change

01 **Need to Improve Patient Outcomes & Safety.** AI can help detect conditions earlier, predict adverse events, and support evidence-based decision-making.

02 **Shortage of Healthcare Professionals & Staff Burnout.** AI can automate routine tasks, reduce administrative burden, and augment capabilities, helping to manage workloads.

03 **Advancements in AI for Medical Image Analysis & Diagnostics.** Deep learning models are achieving high accuracy in areas like radiology and pathology, assisting clinicians.

04 **Availability of Large Healthcare Datasets (for AI training).** EHRs, medical imaging, and genomic data provide rich sources for training AI models for healthcare applications.

05 **Demand for More Efficient Healthcare Delivery.** AI can streamline workflows, automate administrative tasks, and optimize resource allocation.

06 **Rise of Telehealth & Remote Patient Monitoring.** AI is a key enabler for monitoring patients outside traditional clinical settings and providing timely interventions.

07 **Focus on Personalized Medicine & Care.** AI can analyze individual patient data to help tailor treatment plans and educational materials.

08 **Pressure to Reduce Healthcare Costs.** By improving efficiency and preventing adverse events, AI has the potential to reduce overall healthcare expenditures.

09 **Integration of AI into Electronic Health Record (EHR) Systems.** Major EHR vendors are integrating AI features for clinical decision support, documentation, and analytics.

10 **Patient Expectations for More Accessible & Proactive Care.** AI can power tools for self-triage, remote monitoring, and personalized health information, meeting patient demands.

§ 05 VARIATION 5 SECTORS

Impact by sector

The headline figure is an average. Where you work changes the picture.

Critical Care / ICU Nurses	AI for real-time monitoring of critically ill patients, predictive analytics for sepsis or cardiac events, and decision support for complex interventions.
Emergency Room (ER) Nurses	AI for rapid triage assistance, diagnostic support (e.g., interpreting ECGs), and managing patient flow in high-pressure environments.
Medical-Surgical Nurses	AI for medication administration safety checks, automated charting, early warning systems for patient deterioration, and personalized patient education.
Oncology Nurses	AI for analyzing genomic data for personalized treatment planning, managing side effects of chemotherapy, and providing patient support resources.
Community Health / Home Health Nurses	AI for remote patient monitoring, telehealth support, optimizing visit schedules, and providing community-based health education.

§ 06 PREPARATION 8 SKILLS

Skills to build

The skills that keep the human part of this work valuable as the routine part is automated.

01 **Clinical Judgment & Critical Thinking.** Ability to synthesize information (including AI-generated data), make sound clinical decisions, and prioritize care in complex situations.

02 **Empathy & Patient Communication.** Providing compassionate care, actively listening to patients and families, and clearly explaining conditions and treatment plans.

03 **Technical Proficiency with AI Clinical Tools.** Skill in using EHRs with AI features, clinical decision support systems, remote monitoring devices, and other AI-powered medical technologies.

04 **Data Interpretation & Validation.** Critically assessing AI-generated alerts or diagnostic suggestions, understanding potential limitations or biases, and validating against clinical findings.

05 **Interdisciplinary Collaboration (with AI insights).** Effectively communicating AI-derived insights to doctors, therapists, and other members of the healthcare team to coordinate care.

06 **Adaptability & Continuous Learning (of new tech).** Willingness to learn and integrate new AI tools and data-driven protocols into nursing practice as healthcare technology evolves.

07 **Ethical AI Application & Patient Privacy.** Understanding and upholding patient data privacy, ensuring informed consent for AI use, and mitigating algorithmic bias in clinical tools.

08 **Patient Advocacy in an AI-Augmented Setting.** Ensuring that AI tools are used to enhance, not diminish, patient-centered care and advocating for patient needs within tech-enabled workflows.

§ 07 INSTRUMENTS 11 ENTRIES

Tools in use

KINDS OF TOOL WORTH KNOWING

01 **AI-Powered Clinical Decision Support Systems (CDSS).** Software integrated into clinical workflows that analyzes patient data and provides evidence-based recommendations or alerts to clinicians.

02 **Electronic Health Record (EHR) Systems with AI Features.** Modern EHRs are embedding AI for tasks like intelligent charting, order entry suggestions, and flagging potential issues.

03 **Remote Patient Monitoring (RPM) Platforms with AI.** Systems that use wearables and sensors to collect patient data remotely, with AI analyzing trends and alerting nurses to significant changes.

04 **AI Medical Scribes / Voice-to-Text Dictation.** AI tools that automatically transcribe spoken notes into text for EHR documentation, reducing manual charting time.

05 **Predictive Analytics Dashboards (for patient risk).** Platforms that use machine learning to predict patient risks (e.g., readmission, deterioration) based on historical and real-time data.

06 **AI-Assisted Medical Image Viewers (for reference).** While primary interpretation is by radiologists/pathologists, nurses may encounter AI tools that highlight areas on images for further review or provide comparative analysis.

NAMED TOOLS ALREADY IN USE

Epic / Cerner (EHRs with increasing AI capabilities)
Major EHR providers are integrating AI for clinical decision support, predictive analytics, and workflow automation features.

Viz.ai (AI for stroke detection and care coordination)
An AI-powered platform that analyzes brain scans to detect large vessel occlusion strokes and helps coordinate care teams faster.

Current Health / Biofourmis (Remote Patient Monitoring & AI Analytics)
Platforms that use AI to analyze data from wearables and remote sensors to monitor patients at home and predict clinical exacerbations.

Nuance Dragon Medical One (Voice recognition for clinical documentation)
A cloud-based speech recognition solution widely used by clinicians, including nurses, for dictating notes directly into EHRs.

Various internal predictive models developed by hospital systems (e.g., for sepsis prediction)
Many healthcare systems are developing and deploying proprietary AI models trained on their patient data to predict risks like sepsis, readmissions, or patient deterioration.

§ 08 EXAMPLES 5 EXAMPLES

In practice

Ways people in this role are already using AI, and what they get from it.

Receive AI-Generated Alerts for Patient Deterioration

EXAMPLE 1

HOW In a hospital setting, an AI system monitoring vital signs and lab results might alert you to a patient at high risk of sepsis, prompting earlier intervention.

GAIN Enables earlier detection of critical conditions, leading to faster treatment, improved patient outcomes, and potentially reduced mortality.

Use AI to Streamline Admission/Discharge Summaries

EXAMPLE 2

HOW Employ AI tools that can extract key information from a patient's chart to help draft initial admission notes or discharge summaries, which you then review and finalize.

GAIN Reduces time spent on administrative documentation, allowing more time for direct patient care and ensuring more accurate and complete records.

Leverage AI for Personalized Patient Education Material

EXAMPLE 3

HOW Use AI platforms that can tailor patient education handouts or videos based on their specific condition, learning preferences, and language, improving comprehension.

GAIN Enhances patient understanding and adherence to treatment plans, leading to better self-management and health outcomes.

Monitor At-Risk Patients Remotely with AI Analytics

EXAMPLE 4

HOW For patients with chronic conditions at home, AI-powered remote monitoring systems can track their data and alert you to trends or events requiring a telehealth check-in or visit.

GAIN Allows for proactive management of chronic conditions, reduces hospital readmissions, and improves quality of life for patients.

Utilize AI for Verifying Medication Orders

EXAMPLE 5

HOW Use AI features within the EHR or standalone tools to double-check medication orders for potential interactions, correct dosages, or allergies before administration.

GAIN Increases medication safety, reduces the risk of adverse drug events, and supports best practices in medication administration.

§ 09 CONTEXT

How this role compares

Three neighbouring roles chosen to show the direction of travel.

Medical Records & Health Information Technicians (Basic data entry/coding) MORE EXPOSED	AI IMPACT	High (AI can automate medical coding, data entry, and record organization based on NLP and structured data)
	WORK MOVES TO	Shift towards managing AI systems, data quality assurance, auditing, and more complex health information analysis.
Healthcare Data Scientists / AI in Healthcare Developers DIFFERENT SKILLS, GROWING	AI IMPACT	Foundational (They build, train, and validate the AI models and clinical support tools that nurses will use)
	WORK MOVES TO	Deep expertise in AI/ML, statistics, programming, and clinical data analysis; understanding of healthcare regulations.
Physicians (Complex Diagnostics & Treatment Planning) COMPLEMENTARY, LESS EXPOSED	AI IMPACT	High Augmentation (AI as a powerful diagnostic aid, treatment option suggester), but ultimate clinical responsibility and complex decision-making remain human.
	WORK MOVES TO	Interpreting AI insights within a broader clinical context, patient communication, leading care teams, and making final treatment decisions.

§ 10 VERDICT

Closing judgement

> For Registered Nurses, AI is emerging as a powerful clinical assistant, capable of enhancing diagnostic accuracy, streamlining workflows, and improving patient safety. The core of nursing – compassionate care, critical thinking, patient advocacy, and complex human interaction – will remain irreplaceable, but will be augmented and supported by intelligent technologies.

§ 11 BASIS REVISED 5 OCTOBER 2026

Evidence and revisions

What the exposure figure rests on, what changed when it was last revised, and the published work cited for this role.

SCORE

35 to 34

WINDOW

4-9 years (unchanged)

The 5 October 2026 review moved the score down by 1 points.

Exposure Index v2. Inputs: task applicability 24/100 (Microsoft AI applicability score 0.12 for Registered nurses); observed usage 8/100 (Anthropic observed exposure 0.06); official exposure tier 70/100 (BLS: high); labour-market trajectory 36/100 (BLS projects employment to grow 5.6% over 2025–35); published adoption rating 40/100 (medium adoption). Weighted base 33.7. Final score 34. The previous figure of 35 was lowered by 1 point, a small change that comes from moving off scores rounded to the nearest five. The change window is unchanged.

HOW THE FIGURE IS BUILT (EXPOSURE INDEX V2)

Task applicability — Microsoft Research, AI applicability score	24 × 35%	8.5
Observed usage — Anthropic Economic Index, observed exposure	8 × 20%	1.6
Official exposure tier — US BLS AI-exposure category	70 × 20%	14.0
Labour-market trajectory — US BLS projected employment change 2025–35	36 × 10%	3.6
Published adoption rating — This report's adoption level	40 × 15%	6.0
Weighted base		33.7
Exposure score		34

MEASURES BEHIND THE SCORE

US Bureau of Labor Statistics · *Employment Projections 2025–35 and AI Exposure Categories* (27 August 2026)

AI-exposure tier: High. Projected employment change 2025–35: +5.6%. Matched to Registered nurses.

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Microsoft Research · *Working with AI: Measuring the Applicability of Generative AI to Occupations* (10 July 2025)

AI applicability score 0.12 (percentile 41 of 785 occupations) for SOC 29-1141.

PUBLISHER PDF ARCHIVED COPY

Anthropic · *Anthropic Economic Index report: Cadences* (26 June 2026)

Observed exposure 0.06 for SOC 29-1141 (percentile 69 of 756 occupations).

PUBLISHER PDF

UK Department for Science, Innovation and Technology · *Assessment of AI capabilities and the impact on the UK labour market* (28 January 2026)

UK context: around 70% of UK workers are in occupations with tasks AI could perform or enhance, above the US average; a one-standard-deviation rise in exposure was associated with a 3.9% fall in UK job postings.

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ALSO CITED FOR THIS ROLE

McKinsey Global Institute · *Agents, robots, and us: Skill partnerships in the age of AI* (25 November 2025)

Skills tied to assisting and caring are expected to change least; this is where AI most clearly complements rather than substitutes.

PUBLISHER

International Monetary Fund · *Bridging Skill Gaps for the Future: New Jobs Creation in the AI Age* (14 January 2026)

The IMF places clinical and care roles in the high-complementarity group, where AI raises productivity without reducing headcount.

PUBLISHER PDF

Indeed Hiring Lab · *AI at Work Report 2025: How GenAI is Rewiring the DNA of Jobs* (23 September 2025)

Indeed rates nursing the least exposed major occupation (68% of typical skills minimally affected).

PUBLISHER

Archived copies are served only where the licence permits; otherwise the link goes to the publisher. Full research library: https://www.careerguard.ai/sources

§ 12 APPENDIX

Method and sources

Each report was written from a large body of published research. The exposure score itself is computed, not written: it is the CareerGuard Exposure Index, a weighted average of occupation-level measures from the US Bureau of Labor Statistics (AI-exposure classification and 2025–35 projections), Microsoft Research (AI applicability scores) and Anthropic (observed exposure), together with the adoption rating published on the report. The organisations and publications below are the standing literature behind the narrative sections. Every source, with dates, licences and archived copies where we are permitted to hold them, is catalogued in the research library.

Exposure Index v2 (October 2026). Each input is scaled to 0–100 and weighted: task applicability 35% (Microsoft AI applicability score ÷ 0.5), observed usage 20% (Anthropic observed exposure ÷ 0.75), official exposure tier 20% (BLS very high = 100, high = 70, moderate = 40, low = 10), labour-market trajectory 10% (50 2.5 × projected % employment change), published adoption rating 15% (very high = 85, high = 70, medium-high = 55, medium = 40, low-medium = 25, low = 10). Inputs not measured for an occupation are dropped and the remaining weights renormalised. An editorial adjustment of at most ±12 points is allowed only for automation channels the measures cannot see (robotics, self-service, machine vision, medical imaging, RPA/OCR, generative video) and is always logged with its reason. Scores are whole numbers, not rounded to five. The change window shifts one notch (a year at each end) per ten points of movement.

I GLOBAL AND MACROECONOMIC IMPACT OF AI ON WORK

World Economic Forum

The Future of Jobs Report series — Employer survey of expected job growth and decline, skill shifts and technology adoption (2020, 2023 and 2025 editions); Artificial Intelligence and the Future of Entry-Level Work (2026).
AI governance and transformation reports — Frameworks on ethical AI, talent strategy and industry transformation.

McKinsey Global Institute
AI, Automation and the Future of Work series — Research quantifying automation potential by task, sector and demographic, from "Jobs Lost, Jobs Gained" to "Agents, robots, and us" (2025).
Industry-specific reports — Financial services, healthcare, manufacturing and others.

PwC
Global AI Jobs Barometer — Annual analysis of job postings and productivity by AI exposure (2024–2026 editions).
Upskilling Hopes and Fears survey — Employee perceptions and readiness.

Microsoft Research and Anthropic
Working with AI (2025); Anthropic Economic Index (2025–2026) — Occupation-level usage data from Copilot and Claude conversations, the two observed-usage measures behind the 2026 revision.

Stanford Digital Economy Lab and Stanford HAI
Canaries in the Coal Mine? (2025–2026); AI Index Report (annual) — Payroll evidence on early-career employment in exposed occupations; annual measurement of AI capability, investment and adoption.

Deloitte
Human Capital Trends series — Workforce, talent and HR technology trends.
Tech Trends series — Emerging technologies and their business implications.

Accenture
Technology Vision series — Forward-looking analysis of emerging technology, with emphasis on AI.
Fjord Trends — Design, innovation and human experience in a digital world.

Boston Consulting Group
AI/ML insights and industry solutions — "The AI Revolution in the Workplace" and related research.

EY
AI and workforce reports — Adoption, talent strategy and ethics.

IBM Institute for Business Value
AI and automation studies — Business models, workforce evolution and leadership.

OECD
AI Policy Observatory — International data and policy on AI, labour markets and skills.
Employment Outlook — Labour-market trends including technological impact (2023–2026 editions).

International Labour Organization
Generative AI and Jobs: A Refined Global Index of Occupational Exposure (2025) — Task-level exposure gradients for every ISCO occupation; successor to the 2023 global index.

International Monetary Fund
Staff Discussion Notes on AI and work (2024, 2026) — Complementarity framing: where AI augments and where it substitutes.

UK Department for Science, Innovation and Technology
Assessment of AI capabilities and the impact on the UK labour market (2026) — UK occupational exposure and job-posting evidence.

Brookings Institution
AI and automation research — Economic and social implications, displacement and skills.

Yale Budget Lab and Goldman Sachs Research
Tracking the Impact of AI on the Labor Market; AI and the US labour market (2026) — Aggregate labour-market monitoring; macro displacement estimates.

Oxford University (Oxford Martin School)
The Future of Employment — Frey & Osborne and subsequent research on susceptibility to automation.

MIT Technology Review
AI & Work — Reporting on AI research and its implications for industries and jobs.

Gartner
Hype Cycle for Artificial Intelligence — Maturity and adoption of AI technologies.
Future of Work reports — Workplace models and talent strategy.

U.S. Bureau of Labor Statistics
Employment Projections 2025–35; AI Exposure Categories; Occupational Outlook Handbook — Ten-year employment projections and, from the 2025 cycle, an AI-exposure tier for every detailed occupation.

Indeed Hiring Lab
AI at Work Report (2025) and posting-market updates — Skill-level transformation estimates and job-posting trends by occupation.

II CORE AI AND MACHINE-LEARNING RESEARCH

OpenAI
Research papers, blog and API documentation — Large language models, generative AI, safety and societal impact.

Google DeepMind
Research papers and blog — Reinforcement learning, AI for science, AGI and ethics.

Meta AI
Research papers and blog — Large language models, computer vision, AI for social good.

Hugging Face
Transformers library and model hub — Open-source state-of-the-art NLP models.

TensorFlow and PyTorch
Documentation and community forums — Core frameworks illustrating practical capability.

arXiv
cs.AI, cs.LG, cs.CV, cs.CL — Pre-print research.

NeurIPS and ICML
Conference proceedings — Top-tier academic research.

ACM and IEEE
Journals and proceedings — ACM Computing Surveys; IEEE Transactions on AI.

Kaggle
Datasets and competition solutions — Applied machine learning on real-world problems.

The Alan Turing Institute
Research and reports — Responsible and applied AI.

III ETHICAL AND RESPONSIBLE AI DEPLOYMENT

NIST
AI Risk Management Framework — Voluntary framework for managing AI risk.

European Commission
AI Act — Risk-tiered legal framework for AI.
Ethics Guidelines for Trustworthy AI — Principles for responsible development.

Partnership on AI
Research and best practice — Responsible AI development.

AI Now Institute
Annual reports — Social implications: power, inequality, rights.

ACM FAccT
Proceedings — Fairness, accountability and transparency.

Data & Society
Publications — Social implications of data-centric technology.

WIPO
Conversation on IP and AI — Intellectual-property implications of AI.

IEEE Global Initiative on Ethics of A/IS
Ethically Aligned Design — Recommendations for ethical AI design.

Center for AI and Digital Policy
Policy briefs — Accountable AI policy.