

Medical Assistants

AI profoundly augmenting administrative tasks, patient intake, and basic clinical support for Medical Assistants.

EXPOSURE	WINDOW	ADOPTION TODAY	READING
55 Elevated exposure	3–6 yrs until change lands	High	The role is being reshaped. Exposure is the share of today's work AI can plausibly take on within the window.

§ 01WHAT IS HAPPENING

What is happening to medical assistants

Impact

AI tools are automating appointment scheduling, patient intake forms, medical dictation, and providing basic patient information. This shifts Medical Assistants' focus towards building profound patient rapport, handling complex human interactions, supporting clinical procedures, and providing empathetic patient navigation.

Risk

Significant augmentation; emphasis on patient interaction, empathetic communication, and clinical support.

The Medical Assistant role will be heavily augmented by AI. AI will handle much of the routine data collection, scheduling, and administrative tasks. Medical Assistants will need to become experts in leveraging AI tools for efficiency and enhanced patient experience, critically evaluating AI outputs, and focusing on the irreplaceable human elements of the role: empathetic patient communication, precise assistance during clinical procedures, and nuanced problem-solving in patient care coordination.

Sector readiness

Rapid & Transformative Integration

The primary care and outpatient clinic sectors are aggressively integrating AI, driven by overwhelming demand, workforce shortages, and the push for hyper-efficiency. AI is rapidly moving beyond pilot stages to widespread adoption for administrative automation, patient intake, and basic clinical support, fundamentally altering traditional workflows.

§ 02 POSITION

Where you stand

- i The Medical Assistant role is undergoing a profound and accelerating redefinition by AI, fundamentally restructuring administrative tasks, patient intake, and basic clinical support.
- ii AI will autonomously manage scheduling, documentation, and initial patient triage, compelling Medical Assistants to pivot to indispensable human empathy, nuanced patient communication, and efficient clinical procedure support.
- iii Survival and impact will hinge on Medical Assistants mastering AI tools, critically validating AI outputs, championing ethical AI use in patient data, and providing irreplaceable human connection at the heart of patient care coordination.

§ 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-Automated Patient Intake & Scheduling.** Medical Assistants will oversee AI systems that autonomously manage appointment scheduling, handle patient registration, and process intake forms prior to consultations. This radically frees up time for direct patient engagement and clinical duties, demanding validation of AI outputs.
- 02 **AI-Powered Medical Scribing & Documentation.** Medical Assistants will utilize AI digital scribes that autonomously transcribe physician-patient conversations and automatically populate EHR fields with relevant clinical data. This eliminates manual note-taking, allowing Medical Assistants to focus on patient interaction and real-time support during exams.
- 03 **Predictive Analytics for Patient Flow & No-Shows.** Medical Assistants will leverage AI models that autonomously analyze historical appointment data and patient demographics to predict no-show rates or optimize patient flow within the clinic. This enables proactive outreach or scheduling adjustments to maximize clinic efficiency.
- 04 **AI-Assisted Patient Communication & Education.** AI will autonomously handle a significant portion of routine patient communication, including appointment reminders, basic pre-visit instructions, and personalized follow-up messages. Medical Assistants will focus on addressing specific patient concerns and providing empathetic support.
- 05 **Intelligent Inventory & Supply Management.** AI will autonomously track clinic supply inventory, predict demand for medical consumables, and automate reordering from suppliers. This streamlines back-of-house operations, ensuring availability of necessary supplies and reducing waste.

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- 06 **Focus on Direct Patient Interaction & Rapport Building.** As AI assumes command of administrative and data tasks, the paramount value of Medical Assistants will be the irreplaceable human ability to build profound rapport with patients, make them feel comfortable, and address their non-clinical needs with empathy.
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- 07 **AI-Driven Vitals & Basic Assessment Support.** Medical Assistants may utilize AI-powered devices or systems that autonomously capture vital signs, perform basic physical assessments (e.g., using computer vision for gait analysis), and input data directly into the EHR. The Medical Assistant will verify these readings and manage patient comfort.
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- 08 **Ethical AI in Patient Data & Privacy.** Medical Assistants will bear profound responsibility for ensuring AI tools protect sensitive patient data, address algorithmic bias in patient communication or scheduling, and uphold ethical standards in all AI-augmented clinical practices. Trust and confidentiality remain paramount.
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- 09 **AI-Assisted Triage & Symptom Collection.** AI-powered chatbots or virtual assistants will autonomously collect initial patient symptoms and perform basic triage prior to a visit. Medical Assistants will review AI-generated summaries, preparing physicians with concise, pre-analyzed patient information.
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- 10 **Human-AI Teaming for Clinical Support.** Medical Assistants will operate in seamless human-AI teams. AI will provide real-time patient data, suggest next steps for patient intake, and streamline documentation. The human Medical Assistant will lead patient interaction, perform procedures, and manage complex situations.
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- 11 **Automated Referral & Prior Authorization Processing.** AI tools will autonomously assist in generating referral forms, finding appropriate specialists, and managing prior authorization requests with insurance companies. This reduces administrative overhead and speeds up patient care coordination.
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- 12 **Continuous Learning & Digital Health Literacy.** The exponential pace of AI integration in healthcare demands that Medical Assistants commit to continuous, aggressive learning of new AI-powered tools, their profound capabilities, and intricate ethical implications, as a foundational competency.
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- 13 **Specialization in AI-Integrated Workflow Management.** The field may see Medical Assistants specializing in managing and optimizing AI-driven clinic workflows, troubleshooting AI system issues, and training other staff on new AI-powered tools.
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- 14 **AI for Patient Education & Compliance Monitoring.** AI can autonomously generate personalized patient education materials. Medical Assistants will leverage AI to track patient engagement with these materials and predict adherence to treatment plans, enabling targeted follow-ups.
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- 15 **Leadership in Clinic Efficiency & Patient Experience.** Medical Assistants will play a leading role in optimizing clinic efficiency through AI adoption, advocating for patient-centric digital solutions, and ensuring a seamless, positive patient experience from initial contact through follow-up.
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What is pushing this change

- 01

Explosive Growth of Patient Data (EHRs, Billing, Scheduling). Vast amounts of patient data from EHRs, scheduling systems, and billing provide rich input for AI models.
- 02

Advancements in AI/ML (NLP, Predictive Analytics, Conversational AI). Breakthroughs in AI fields enable sophisticated analysis of patient data, automated communication, and intelligent predictions.
- 03

Urgent Demand for Faster & More Efficient Clinic Operations. Outpatient clinics are overwhelmed, demanding AI solutions to manage patient volume and streamline administrative processes.
- 04

Critical Shortage of Healthcare Support Staff. The severe global shortage of medical assistants and support staff compels AI adoption to radically augment human capacity.
- 05

Relentless Pressure for Cost Optimization in Outpatient Care. AI automation of scheduling, documentation, and supply management drives aggressive clinic cost reductions.
- 06

Pervasive Patient Expectations for Digital Convenience. Patients expect online scheduling, digital forms, and personalized reminders, which AI can deliver.
- 07

Complexity of Patient Intake & Care Coordination. Managing complex patient intake with diverse insurance, medical histories, and consent forms is challenging; AI assists.
- 08

Growth of Telehealth & Remote Patient Engagement. AI's ability to facilitate virtual consultations and remote patient engagement is critical for extending care access.
- 09

Mandatory Regulatory & Compliance Demands (HIPAA). HIPAA and other privacy regulations demand strict data handling, which AI can assist with through automation and security.
- 10

Aging Population & Increased Chronic Conditions. The rapidly aging global population and rising prevalence of chronic conditions create an immense demand for outpatient care.

Impact by sector

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

Front Office Medical Assistants (Admin/Scheduling)	AI for autonomous scheduling, patient registration, and administrative communication. Focus on patient intake experience and clinic flow.
Back Office Medical Assistants (Clinical/Patient Care)	AI for medical scribing, basic vital sign capture, and inventory management. Focus on assisting physicians during exams and patient preparation.

Specialty Clinic Medical Assistants (e.g., Cardiology, Dermatology)	AI for processing specialty-specific intake forms, preliminary symptom analysis for that specialty, and generating specialized referral documents.
Telemedicine Medical Assistants	AI for virtual patient intake, symptom triage, and assisting with remote consultations (e.g., managing virtual waiting rooms).
Remote Patient Monitoring (RPM) Medical Assistants	AI for managing data from wearables/home sensors, flagging critical alerts for physicians, and initiating automated patient communication based on AI insights.

Skills to build

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

- 01 **Patient-Centered Communication & Empathy.** The core ability to build profound rapport with patients, actively listen to their concerns, and provide compassionate, reassuring support during their healthcare journey.
- 02 **Clinical Support Skills (Vitals, Procedures).** Proficiency in taking vital signs, assisting with examinations, performing basic lab tests, and preparing patients for procedures.
- 03 **AI/Digital Health Literacy.** Proficiency in using AI-powered scheduling software, EHRs with AI features, digital scribes, and interpreting AI-generated patient insights.
- 04 **Administrative & Workflow Management.** Mastery of clinic administrative processes, patient flow management, and the ability to optimize daily workflows with AI assistance.
- 05 **Ethical Data Handling & Patient Privacy.** Profound understanding of HIPAA and other privacy regulations, ensuring secure handling of sensitive patient data and ethical AI deployment.
- 06 **Problem-Solving & Resourcefulness.** The ability to quickly identify and resolve unexpected patient issues, administrative glitches, or supply chain problems that AI cannot manage.
- 07 **Attention to Detail & Accuracy.** Maintaining extreme precision in patient registration, documentation, and procedural assistance, ensuring data integrity and patient safety.
- 08 **Interprofessional Collaboration.** Working effectively with physicians, nurses, and other healthcare professionals to ensure coordinated and holistic patient care.

Tools in use

KINDS OF TOOL WORTH KNOWING

- 01

AI-Powered Scheduling Software. Software that uses AI to optimize appointment scheduling, predict no-shows, and manage patient flow in clinics.
- 02

AI Digital Scribes. AI tools that autonomously transcribe physician-patient conversations and populate EHRs with clinical notes.
- 03

AI for Patient Intake & Triage (Chatbots). AI-powered chatbots or virtual assistants that autonomously collect initial patient symptoms and perform basic triage prior to a visit.
- 04

AI-Enhanced EHRs (Electronic Health Records). EHR systems with integrated AI for intelligent charting, order entry suggestions, and patient data analysis.
- 05

Predictive Analytics for Patient No-Shows. AI models that autonomously analyze historical appointment data to predict patient no-show rates and suggest overbooking strategies to maximize clinic efficiency.
- 06

AI for Medical Inventory Management. AI software that autonomously tracks clinic supply inventory, predicts demand for medical consumables, and automates reordering from suppliers.

NAMED TOOLS ALREADY IN USE

- VantagePoint AI (for scheduling) / Phreesia (AI for patient intake)**

VISIT

AI-powered platforms for optimizing patient flow, including intelligent scheduling and registration.
- Nuance Dragon Medical One / Suki**

VISIT

AI-powered voice recognition and medical dictation solutions that radically automate clinical note-taking and integrate seamlessly with EHRs.
- Phreesia (AI for patient intake) / Ada Health (symptom checker)**

VISIT

AI-powered platforms that autonomously collect patient information and provide initial symptom analysis for pre-visit triage.
- Epic / Cerner (EHRs with increasing AI capabilities)**

VISIT

Major Electronic Health Record systems that are progressively embedding AI for critical clinical decision support and patient management.
- Proprietary AI models (developed by large healthcare systems)**

VISIT

AI/ML models developed by large healthcare systems to predict patient no-show rates and optimize clinic scheduling for efficiency.
- Medline (AI solutions for supply chain) / Cardinal Health (AI for inventory)**

VISIT

AI solutions for optimizing medical supply chain management, including inventory tracking and demand forecasting.

In practice

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

Automate Patient Scheduling EXAMPLE 1	HOW Medical Assistants will oversee an AI-powered scheduling system that autonomously books patient appointments based on physician availability, patient preferences, and visit urgency. The AI will also manage rescheduling and cancellations, optimizing the clinic's calendar. GAIN Radically improves clinic efficiency, minimizes scheduling conflicts, and optimizes patient flow for higher throughput.
Streamline Clinical Note Taking EXAMPLE 2	HOW During a patient examination, Medical Assistants will speak their observations and physician's directives. An AI digital scribe will autonomously transcribe the conversation and extract key clinical details, populating the EHR note in real-time for minimal review. GAIN Dramatically reduces administrative burden and charting time, allowing Medical Assistants to dedicate almost all their time to direct patient care and clinical assistance.
Predict Patient No-Shows EXAMPLE 3	HOW Medical Assistants can utilize an AI model that autonomously analyzes historical appointment data and patient demographics. The AI predicts patients most likely to miss their appointments, triggering proactive, personalized outreach to confirm or reschedule. GAIN Significantly reduces missed appointments, optimizes clinic capacity, and improves overall patient access to care.
Automate Patient Reminders EXAMPLE 4	HOW Medical Assistants will configure an AI-powered communication platform to autonomously send personalized appointment reminders, pre-visit instructions, and post-visit follow-up messages to patients via text or email, reducing manual calls. GAIN Ensures consistent and timely patient communication, improves patient adherence to instructions, and reduces administrative workload.
Manage Clinic Inventory EXAMPLE 5	HOW Medical Assistants will manage an AI system that autonomously tracks clinic supply inventory levels (e.g., gloves, bandages, syringes). The AI predicts consumption rates, identifies low stock, and automatically generates reorder requests for optimal supply management. GAIN Radically optimizes supply levels, minimizes stockouts and waste, and ensures clinic operations run smoothly with minimal manual inventory checks.

How this role compares

Three neighbouring roles chosen to show the direction of travel.

Front Desk Receptionists (Healthcare) / Data Entry Clerks (Medical) MORE EXPOSED	AI IMPACT Catastrophic (AI can autonomously manage appointment booking, patient registration, and medical data input.) WORK MOVES TO Immediate need for radical re-skilling into AI oversight, exception handling for patient records, or specialization in complex patient navigation.
Digital Health Workflow Specialists / AI in Healthcare Implementers (Support Role) DIFFERENT SKILLS, GROWING	AI IMPACT Foundational (They implement and optimize AI-powered workflows within clinics and train staff on AI tools.) WORK MOVES TO Deep expertise in AI/ML applications in healthcare, workflow automation, and change management for digital health solutions.
Registered Nurses (Direct Patient Care) / Physicians (Complex Clinical Decisions) COMPLEMENTARY, LESS EXPOSED	AI IMPACT Low-Moderate Augmentation (AI assists in vitals, documentation for RNs; AI provides data for physicians), but core hands-on care, medication administration, and ultimate diagnostic responsibility remain paramount. WORK MOVES TO Hands-on patient care, medication administration, and vital sign monitoring (RNs); Complex diagnostic reasoning and ultimate treatment responsibility (Physicians).

Closing judgement

For Dental Assistants, AI and robotics are not merely tools but a radical force of transformation that will fundamentally redefine their role. It will autonomously manage the mundane and amplify patient support, compelling Dental Assistants to pivot to indispensable human empathy, nuanced communication, and efficient, complex chairside assistance. The future Dental Assistant will be a visionary orchestrator of human-AI collaboration, providing irreplaceable connection at the heart of dental care.

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

70 to 55

WINDOW

2-5 years to 3-6 years

The 4 October 2026 review moved the score down by 15 points.

Microsoft's AI applicability score for the matching occupation is 0.07, in the bottom quarter of 785 US occupations; Anthropic's observed exposure (the share of the occupation's tasks already being done with Claude) is 0.05, which is minimal by the standards of the 756 occupations measured; the US Bureau of Labor Statistics places it in the 'moderate' AI-exposure tier; BLS projects employment to grow 12.9% over 2025–35. Blending our 2025 editorial figure (60%) with the 2026 evidence composite (40%) moves the score from 70 to 55 and lengthens the window from 2-5 years to 3-6 years.

MEASURES BEHIND THE SCORE

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

AI-exposure tier: Moderate. Projected employment change 2025–35: +12.9%. Matched to Medical assistants.

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

AI applicability score 0.07 (percentile 19 of 785 occupations) for SOC 31-9092.

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

Observed exposure 0.05 for SOC 31-9092 (percentile 66 of 756 occupations).

PUBLISHERPDF

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 and then, in October 2026, re-scored against occupation-level evidence: the US Bureau of Labor Statistics AI-exposure classification and 2025–35 projections, Microsoft Research's AI applicability scores and Anthropic's observed-exposure data, cross-checked against the reports listed in the Evidence section above. 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.

Scores are revised by blending the previous editorial figure (60%) with a composite of the three occupation-level measures (40%), capped at fifteen points per revision and rounded to the nearest five. The window shifts one notch when a score moves ten points or more. Hand adjustments are recorded with their reason in the revision log.

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 AI/IS

Ethically Aligned Design — Recommendations for ethical AI design.

Center for AI and Digital Policy

Policy briefs — Accountable AI policy.