



# IACAI AI Integration Framework: Learner Matrix

## Equipping undergraduate medical learners to utilize responsible AI integration

The AAMC, in collaboration with AMEE: The International Association for Health Professions Education, the Alliance of Academic Health Centers International (AAHCI), the International Association of Medical Science Educators (IAMSE), and the Asia Pacific Medical Education Network (APMEN), has convened the International Advisory Committee for Artificial Intelligence. Representing diverse global perspectives, the IACAI Committee brings together expertise across regions and disciplines to ensure that emerging AI innovations and educational approaches can be harnessed for the benefit of learners, educators, and institutions worldwide.

Organized by the AAMC's MedBiquitous program, this initiative aims to provide guidance and best practices for the health professions education (HPE) community. The Committee actively monitors the rapidly evolving AI landscape, identifying opportunities, challenges, and ethical considerations that impact learners and the faculty and staff who support them.

Across 12 domains of AI integration, the framework provides actionable recommendations aligned with shared vision statements, supporting educators and institutions in advancing AI integration that is ethical, equitable, and mission-aligned. These domains include:

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|--|---|
| 1. Values, Culture & Integration Plan                  | 7. AI for Assessment and Feedback                             |
| 2. AI Foundation Skills                                | 8. AI for Admissions, Mentorship, and Post-Graduate Selection |
| 3. AI Ethical & Responsible Use                        | 9. AI for Curricular Optimization and Program Evaluation      |
| 4. AI Tools, Systems, and Resources                    | 10. AI for Research and Research Mentorship                   |
| 5. AI for Instruction and Academic Tasks               | 11. AI-Ready Workforce  |
| 6. AI to Enhance Clinical Skills and Clinical Training | 12. AI for Health and Wellbeing                               |

### How to Use This Matrix

Step 1: Identify your role → Intrapersonal (Self), Micro (Educator), Meso (Institution), Macro (Organization), or Mega (Consortia).

Step 2: Select a domain relevant to your context.

Step 3: Find action steps in the corresponding cell of that domain's table.

For additional resources and to learn more, visit: [www.medbiq.org](http://www.medbiq.org).

**For questions, feedback, or assistance using a resource, please contact us at [medbiq@aamc.org](mailto:medbiq@aamc.org)**

# Matrix I: Recommendations for Integrating AI - Learner Focus

<b>Domains and Vision Statements</b>	<b>INTRA-PERSONAL</b> <i>Recommendations for an Educator on the personal, preparatory or conceptual level</i>	<b>MICRO</b> <i>Recommendations for a Medical Educator in practice</i>	<b>MESO</b> <i>Recommendations for an individual Medical School</i>	<b>MACRO</b> <i>Recommendations for individual Medical Education Organizations (AMEE, IAMSE, AAMC, NBME)</i>	<b>MEGA</b> <i>Recommendations for an International Med Ed AI Consortium (IACAI and similar)</i>
<p><b>1. AI Values, Culture and Integration Plan</b></p> <p><i>AI is thoughtfully integrated into the curriculum, with careful consideration to learner needs, time constraints, and core values.</i></p>	<p>1.1 Develop self-awareness about one's own knowledge, skills, and attitudes towards AI.</p> <p>1.2 Recognize the range of attitudes toward AI in medical education, and reflect on how one's own perspective aligns with, or differs from, that of others.</p> <p>1.3 Reflect on what AI integration means in medical education: how AI tools and systems are incorporated into teaching, learning, and clinical training to enhance educational experiences and outcomes.</p> <p>1.4 Reflect on personal feelings about AI integration in medical education, including excitement, anxiety, skepticism, or resistance, and consider how these emotional responses may influence one's approach to learning with and about AI technologies.</p>	<p>2.1 Proactively explore the institution's AI vision, available resources, and governing policies through orientation materials, institutional websites, and resource repositories, identifying specific tools, training opportunities, support services, and guidelines that are relevant to one's academic and clinical contexts.</p> <p>2.2 Actively participate in institutional AI training, engaging critically with content on AI policies, ethical frameworks, and responsible use guidelines, and reflect on how these institutional standards apply to personal learning strategies and professional development.</p> <p>2.3 Take initiative in exploring optional AI training opportunities, attending relevant workshops or conferences, or participating in student-led AI interest groups to deepen understanding beyond required coursework.</p> <p>2.4 Actively participate in institutional AI integration initiatives by providing feedback on AI tool implementations, contributing to pilot programs, or engaging in co-design processes that shape how AI is used in the curriculum.</p> <p>2.5 Navigate varying faculty approaches to AI integration across different courses and clinical settings by seeking clarification on expectations, understanding different pedagogical perspectives, and adapting one's learning strategies accordingly.</p> <p>2.6 Engage in reflective discussions with peers and faculty about the role of AI in medical education, sharing diverse perspectives on how AI integration aligns with or challenges traditional medical education values and practices.</p> <p>2.7 Critically evaluate institutional AI integration approaches by considering factors such as learner autonomy, educational effectiveness, equity of access, alignment with professional values, and balance between innovation and evidence-based practice.</p> <p>2.8 Critically examine, in collaboration with faculty and through available resources and guided discussion, how AI is transforming undergraduate medical education and healthcare practice, including its impact on clinical decision-making, diagnostic processes, educational pedagogy, patient-physician relationships, and the skills and competencies required of future physicians (appropriate to training stage).</p> <p>2.9 Explore anticipated future developments in AI, including Artificial General Intelligence (AGI) and superintelligence, understanding potential trajectories, timeframes, and implications for medical practice and healthcare systems, while recognizing the inherent uncertainty in forecasting technological advancement and its societal impact through available resources and guided discussion.</p>	<p>3.1 Communicate institutional AI vision, resources, training opportunities, and policies to learners.</p> <p>3.2 Foster AI learning communities for learners.</p> <p>3.3 Involve learners in AI committees in order to consider their AI perspectives and input.</p> <p>3.4 Develop and implement a cohesive strategy for integrating AI into the curriculum that includes mechanisms for ongoing learner feedback, iterative refinement based on educational outcomes, and transparent communication about integration goals and progress.</p> <p>3.5 Foster dynamic opportunities for co-learning about AI, encouraging synergy and collaboration between faculty, staff, and learners.</p> <p>3.6 Ensure equitable access to AI resources, training, and opportunities across all learner populations, addressing potential disparities related to prior experience, technical access, specialty interests, or learning preferences.</p> <p>3.7 Provide comprehensive support systems for learners navigating AI integration, including technical assistance, pedagogical guidance, emotional support for AI-related concerns, and clear pathways for raising questions or concerns.</p>	<p>4.1 Facilitate the creation of a shared AI vision based on common values across various communities, cultures, and countries.</p> <p>4.2 Bring together stakeholders to participate in cross-institutional forums for strategic planning regarding AI integration.</p> <p>4.3 Engage in futurecasting to anticipate and shape the long-term impact of AI in healthcare and medical education.</p> <p>4.4 Create and openly share resources across organizations, including implementation frameworks, evaluation tools, case studies of successful integration approaches, and evidence-based guidance on addressing common challenges in AI integration.</p> <p>4.5 Create mechanisms for learner voice in shaping institutional AI culture, recognizing that while learners may have limited formal authority, their perspectives and experiences are essential for developing responsive, effective AI integration approaches.</p> <p>4.6 Foster national dialogue about learner experiences with AI integration, creating forums where learners can share challenges, successes, and recommendations for cultural change within medical education institutions.</p>	<p>5.1 Establish a global AI in Medical Education Consortium with rotating leadership from across the globe.</p> <p>5.2 Convene diverse stakeholder committees including learners, educators, technologists, ethicists, and healthcare leaders to identify key priorities and common goals with respect to AI integration in medical education, ensuring student voice is central to strategic decision-making.</p> <p>5.3 Facilitate ongoing global knowledge exchange through regular convenings, shared research initiatives, and collaborative platforms that enable continuous learning about effective AI integration practices, emerging challenges, and evolving learner needs across diverse global contexts.</p> <p>5.4 Coordinate global research initiatives to systematically evaluate the impact of different AI integration approaches on learner outcomes, educational equity, and workforce preparation, ensuring evidence-based refinement of international frameworks and guidelines.</p> <p>5.5 Foster development of international AI leadership development programs for medical education leaders, featuring training in change management, technology adoption frameworks, strategic planning for AI implementation, and cultivation of institutional cultures that support thoughtful AI integration.</p>



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Domains and Vision Statements	INTRA-PERSONAL	MICRO	MESO	MACRO	MEGA
<p><b>2. AI Foundation Skills</b></p> <p><i>Institutions offer training in foundational AI literacy skills for all learners as well as specialized AI training relevant to specific career interests, research focus, and healthcare specializations.</i></p>	<p>1.1 Actively explore reliable introductory resources (such as institutional orientation materials, reputable educational platforms, peer-reviewed articles, or faculty-recommended readings) to build foundational awareness of AI concepts, terminology, capabilities, and limitations relevant to medical education and healthcare practice.</p> <p>1.2 Assess personal baseline AI knowledge and prior experience with AI technologies, reflecting on current comfort level, existing skills, gaps in understanding, and previous exposure to AI tools in academic or personal contexts.</p> <p>1.3 Recognize how foundational AI literacy connects to personal academic success, research productivity, clinical competency development, and future professional practice by exploring specific applications relevant to one's specialty interests and career aspirations.</p> <p>1.4 Engage in exploratory experimentation with AI tools and systems in low-stakes contexts to develop intuitive understanding of capabilities, limitations, and effective prompting strategies through self-directed discovery and hands-on practice.</p> <p>1.5 Cultivate a growth mindset toward AI skill development, viewing mistakes and unexpected outputs during exploration as valuable learning opportunities rather than failures, and maintaining curiosity about emerging AI capabilities and applications.</p>	<p>2.1 Engage with foundational AI training opportunities provided by the institution, applying learned concepts to personal learning strategies, research activities, and clinical skill development.</p> <p>2.2 Participate actively in AI literacy development programs that cover essential topics such as AI capabilities and limitations, algorithmic reasoning, data literacy, prompt engineering, critical evaluation of AI outputs, and ethical considerations in AI use.</p> <p>2.3 Develop practical competency with institution-supported AI tools by experimenting with their features in low-stakes learning contexts, understanding their appropriate applications, and recognizing their limitations before using them in high-stakes academic or clinical situations.</p> <p>2.4 Explore specialized AI training opportunities relevant to specific career interests, research areas, or specialty aspirations, pursuing advanced coursework, certifications, or elective experiences that deepen domain-specific AI expertise.</p> <p>2.5 Seek out peer learning opportunities, study groups, or collaborative projects focused on AI applications in medical education, benefiting from diverse perspectives and shared discovery of effective AI integration strategies.</p> <p>2.6 Build competency in critically evaluating AI-generated outputs for accuracy, bias, completeness, and relevance, developing habits of verification, cross-referencing, and thoughtful integration of AI assistance into personal learning processes.</p>	<p>3.1 Provide comprehensive foundational AI literacy training for all learners covering essential concepts, capabilities, limitations, and ethical considerations relevant to medical education and clinical practice.</p> <p>3.2 Offer specialized AI training pathways relevant to learners' specific career interests, research focus, and healthcare specializations, enabling depth development beyond foundational competencies.</p> <p>3.3 Ensure AI training is integrated systematically across the curriculum rather than treated as isolated add-on content, connecting AI literacy to clinical reasoning, research methods, professionalism, and core medical competencies.</p> <p>3.4 Provide diverse learning formats for AI skill development (e.g., workshops, online modules, hands-on labs, peer learning groups) to accommodate different learning preferences and schedules.</p> <p>3.5 Develop clear competency frameworks and assessment approaches that enable learners to demonstrate AI literacy and track their progression from foundational to advanced AI skills.</p> <p>3.6 Foster faculty development in AI literacy to ensure educators can effectively support, model, and assess learner AI competencies across the curriculum.</p>	<p>4.1 Develop and disseminate standardized AI literacy needs assessment frameworks that enable medical education organizations to benchmark learner competencies, identify gaps across diverse populations (considering prior experience, specialty focus, and educational stage), and share aggregated data to inform national training priorities and resource allocation.</p> <p>4.2 Establish and maintain comprehensive AI literacy resource hubs providing learners with curated, quality-assured educational materials including introductory tutorials, interactive learning modules, case-based examples, terminology glossaries, tool demonstrations, and regularly updated content reflecting rapid AI advancement.</p> <p>4.3 Foster national and regional communities of practice that connect learners, educators, AI specialists, and healthcare professionals to share experiences, address common challenges in AI literacy development, provide peer support, and collectively navigate the evolving AI landscape in medical education.</p> <p>4.4 Deliver comprehensive AI literacy training programs for faculty, staff, and educational leaders across the medical education continuum, ensuring educators are equipped to guide learner AI skill development, model appropriate AI use, and integrate AI literacy content into curricula and professional development activities.</p> <p>4.5 Develop and promote adoption of tiered AI literacy competency frameworks that define foundational, intermediate, and advanced skills appropriate for different educational stages (preclinical, clinical, postgraduate), specialty contexts, and career trajectories, providing clear learning progression pathways.</p> <p>4.6 Establish standards for AI literacy credentialing, micro-credentials, and certification programs that provide portable, nationally-recognized documentation of learner competencies, ensuring quality and consistency across programs while enabling learners to demonstrate skills for career advancement and postgraduate applications.</p>	<p>5.1 Convene international stakeholders (including learner representatives, educators, AI specialists, healthcare leaders, and policymakers) to develop and continuously update universal, multi-tiered AI literacy frameworks that define foundational, intermediate, and advanced competencies adaptable across diverse educational systems, cultural contexts, and healthcare environments worldwide.</p> <p>5.2 Develop global AI literacy competency standards that acknowledge diverse cultural perspectives on technology, learning, collaboration, and professional practice, ensuring frameworks are culturally responsive while maintaining core competencies essential for safe, effective AI use in healthcare across all settings.</p> <p>5.3 Create and maintain a comprehensive, open-access international repository of AI literacy educational resources including multilingual materials, culturally-adapted case studies, diverse healthcare context examples, and resources appropriate for varied resource settings, ensuring global accessibility of high-quality AI education content.</p> <p>5.4 Coordinate multinational research initiatives examining AI literacy development, effective teaching methods across cultures, learning progression patterns, and competency assessment approaches, generating evidence that reflects global diversity and informs continuous improvement of international AI literacy frameworks.</p> <p>5.5 Address global disparities in AI literacy development by supporting capacity building in resource-limited settings, developing low-cost or open-source training materials, facilitating knowledge transfer partnerships between institutions, and ensuring innovations in AI literacy education benefit all learners regardless of geographic location or institutional resources.</p> <p>5.6 Establish mechanisms ensuring authentic learner voice in international AI literacy framework development through formal learner representation on governing bodies, systematic collection of learner perspectives across diverse global contexts, and incorporation of learner-generated insights into continuous framework refinement and resource development.</p> <p>5.7 Coordinate international research examining AI ethics across diverse contexts, investigating cultural variations in norms, the effectiveness of frameworks, and the impact of AI on educational equity.</p> <p>5.8 Support global capacity building through knowledge transfer partnerships, train-the-trainer programs, and mentorship networks, targeting regions with limited infrastructure to ensure equitable development of ethical AI implementation capabilities.</p>



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<p><b>3. AI Ethical and Responsible Use</b></p> <p><i>Institutions offer a strong ethical framework for responsible AI use in medical education.</i></p>	<p>1.1 Reflect on how personal values of integrity, honesty, fairness, and authenticity guide AI use in academic, clinical, and research settings, acknowledging that ethical practice begins with personal commitment to principled behavior.</p> <p>1.2 Examine how professional responsibilities and ethical principles (e.g. beneficence, non-maleficence, autonomy, justice, integrity) apply to AI in medical education and healthcare, noting that obligations extend to how one leverages AI tools and the interpretation of AI-generated information.</p> <p>1.3 Identify potential ethical pitfalls in AI use, including academic dishonesty, overreliance undermining skill development, privacy violations, bias perpetuation, and misrepresenting AI-generated work as original.</p> <p>1.4 Recognize and reflect on common ethical tensions in AI use, such as balancing efficiency gains against learning depth, weighing competitive advantage against fairness, navigating between appropriate assistance and academic dishonesty, and reconciling personal convenience with institutional policies, understanding that ethical AI use often requires navigating ambiguity rather than following simple rules.</p> <p>1.5 Assess how professional identity evolves in AI-augmented healthcare, considering how to maintain humanistic values, critical judgment, and accountability in a technology-mediated environment.</p> <p>1.6 Critically evaluate information from authoritative sources (e.g., professional organizations, ethics literature, institutional policies) addressing key ethical issues in AI, including bias, transparency and explainability, privacy, accountability, and responsible innovation.</p>	<p>2.1. Develop a comprehensive understanding of key AI ethical principles in medical education, including academic integrity (appropriate use vs. dishonesty), intellectual property (proper attribution/citation), data stewardship (patient/research data protection), and authorized use (institutional permissions/restrictions).</p> <p>2.2 Consistently apply institutional AI policies and ethical frameworks: consult guidelines, seek policy clarification, prioritize integrity over convenience, and engage faculty/academic affairs regarding specific AI use in academic and healthcare contexts.</p> <p>2.3 Document AI use transparently in all professional activities by clearly detailing the AI tool, purpose, prompts/inputs, and how outputs were verified or integrated, adhering to relevant citation standards and institutional reporting.</p> <p>2.4 Critically evaluate AI-generated content before use by verifying accuracy against authoritative sources, assessing for bias, and ensuring alignment with academic requirements and professional standards.</p> <p>2.5 Exercise professional judgment to distinguish appropriate AI use from instances where it compromises learning objectives, skill development, or assessment integrity, actively avoiding AI when educationally or ethically inappropriate.</p> <p>2.6 Protect sensitive information by never inputting patient data, PII, proprietary content, or confidential research data into public AI systems. Adhere to applicable data privacy and health information protection regulations by using only secure, institutionally approved AI tools for protected information.</p> <p>2.7 Foster ethical AI use within learning communities by discussing best practices with peers, respectfully addressing potential misuse, and supporting colleagues in navigating ethical dilemmas to build a culture of integrity.</p>	<p>3.1 Establish comprehensive institutional policies for ethical AI use addressing academic integrity, attribution, intellectual property, and critical evaluation. Guidelines must cover all contexts (education, research, clinical) and explicitly address AI limitations, including bias, inaccuracy, and hallucinations.</p> <p>3.2 Ensure AI use policies comply with all applicable legal, regulatory, and ethical standards including data privacy laws, cybersecurity requirements, research ethics regulations, accreditation standards, and patient safety protocols, with regular policy review to align with evolving legal frameworks.</p> <p>3.3 Implement data governance policies and classification systems that define permissible AI inputs, providing learners with practical guidance on protecting patient data, research data, PII, and confidential institutional information.</p> <p>3.4 Disseminate expectations via multiple channels (orientation, syllabi, faculty guidance), utilizing accessible language and concrete examples of appropriate and inappropriate AI use across academic and clinical contexts.</p> <p>3.5 Adopt an educational approach to AI ethics that prioritizes training, inquiry into grey areas, and growth over punishment, while maintaining appropriate consequences for serious violations.</p> <p>3.6 Maintain accessible resources for navigating ethical dilemmas, including ethics consultations, trained faculty advisors, peer forums, and confidential pathways for seeking guidance.</p> <p>3.7 Enforce fair, transparent accountability mechanisms featuring due process, graduated responses based on severity and intent, and opportunities for remediation, ensuring continuous policy improvement through systematic review.</p>	<p>4.1 Develop and disseminate ethical frameworks and evidence-based guidelines for responsible AI integration, addressing academic integrity, data privacy, IP, bias mitigation, transparency, and accountability, with regular updates to address emerging ethical challenges as AI technologies evolve.</p> <p>4.2 Create standardized protocols and practical toolkits for institutional implementation, including policy templates, decision-making flowcharts, case studies, assessment rubrics, and guidance for balancing integrity with appropriate AI-assisted learning.</p> <p>4.3 Establish collaborative networks among member organizations to share best practices, address common challenges, and maintain consistent standards while allowing for institutional flexibility.</p> <p>4.4 Ensure learner perspectives inform policy development through formal representation on ethics committees, systematic feedback collection, and the incorporation of learner insights into resource refinement.</p> <p>4.5 Develop and disseminate ethics education resources for learners and educators (e.g., case modules, decision-making frameworks, and interactive scenarios) adaptable by institutions to build capacity for ethical AI integration and implementation.</p> <p>4.6 Coordinate and support research on AI ethics in medical education, focusing on policy effectiveness, impacts on learning outcomes, unintended consequences of integration, and evidence-based methods for fostering ethical use.</p> <p>4.7 Establish rapid-response mechanisms for novel ethical issues by convening expert working groups to analyze challenges and coordinate collective guidance that transcends individual institutional capacity.</p>	<p>5.1 Coordinate the development of internationally recognized ethical standards for AI use in medical education that respect diverse cultural values, legal frameworks, and religious traditions.</p> <p>5.2 Establish international mechanisms to analyze and respond to emerging ethical challenges, creating rapid-response expert networks to develop guidance and disseminate timely recommendations across diverse healthcare and educational systems.</p> <p>5.3 Foster international collaboration connecting ethicists, educators, policymakers, and technologists to share best practices and build collective capacity, ensuring innovations benefit global medical education while addressing disparities in AI access and infrastructure between resource-rich and resource-limited settings.</p> <p>5.4 Develop comprehensive guidelines for cross-border data sharing and ethical AI research in medical education, ensuring these standards protect individual privacy rights while enabling meaningful international collaboration.</p> <p>5.5 Ensure global learner perspectives inform framework development through international advisory councils and systematic feedback mechanisms, recognizing that learners experience AI ethics differently across cultural and institutional contexts.</p> <p>5.6 Develop and disseminate globally accessible ethics education resources (e.g., multilingual materials and culturally adapted case studies) to ensure learners worldwide can develop ethical AI competencies regardless of institutional resources.</p> <p>5.7 Coordinate international research examining AI ethics across diverse contexts, investigating cultural variations in norms, the effectiveness of frameworks, and the impact of AI on educational equity.</p> <p>5.8 Support global capacity building through knowledge transfer partnerships, train-the-trainer programs, and mentorship networks, targeting regions with limited infrastructure to ensure equitable development of ethical AI implementation capabilities.</p>





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<p><b>5. AI for Instruction and Academic Tasks</b></p> <p><i>AI tools allow learners access to reliable knowledge resources, allowing them time and ability to engage in higher-order critical thinking and problem-solving.</i></p>	<p>1.1 Develop understanding of how AI can enhance learning through personalized support, immediate feedback, varied explanations, and flexible practice opportunities, while recognizing that AI is a supplement to (not a replacement for) active engagement with course material, peer collaboration, and faculty mentorship.</p> <p>1.2 Reflect on personal learning goals, study habits, and academic strengths and weaknesses to identify specific areas where AI tools might provide valuable support, such as concept clarification, retrieval practice, time management, or exam preparation, while maintaining realistic expectations about AI's capabilities.</p> <p>1.3 Recognize the importance of maintaining learner agency and developing independent problem-solving skills, reflecting on how to use AI strategically to enhance understanding without creating dependency or bypassing the cognitive effort necessary for deep learning and long-term retention.</p> <p>1.4 Develop personal judgment about when AI use enhances learning versus when it might impede skill development, recognizing contexts where struggling productively, making mistakes, or consulting human expertise is more valuable than seeking immediate AI assistance.</p> <p>1.5 Reflect on personal values regarding academic integrity, authentic learning, and intellectual honesty, considering how to integrate AI into study practices in ways that support genuine understanding rather than shortcuts that compromise learning or misrepresent one's competencies.</p>	<p>2.1 Use AI to interpret and clarify course syllabi, institutional policies, and assignment requirements, ensuring clear understanding of deadlines, deliverables, performance expectations, and grading criteria, while verifying AI interpretations against official documentation and seeking instructor clarification when needed.</p> <p>2.2 Leverage AI to build and maintain personalized study schedules that map learning activities to course deadlines, exam dates, and clinical rotations, while remaining flexible to adapt plans based on emerging needs, unexpected demands, and personal learning pace.</p> <p>2.3 Use AI strategically to organize complex information, break down difficult concepts into manageable components, explore connections between topics, generate explanations from multiple perspectives, and consolidate understanding through AI-facilitated synthesis and integration of course material.</p> <p>2.4 Engage AI to strengthen critical thinking by testing hypotheses, examining alternative explanations, identifying gaps in reasoning, exploring "what if" scenarios in clinical or scientific contexts, and developing deeper conceptual understanding through guided questioning rather than accepting surface-level answers.</p> <p>2.5 Use AI to systematically compare topics covered in courses against board exam blueprints, national competency frameworks, or specialty requirements to identify personal knowledge gaps, prioritize study efforts, and ensure comprehensive coverage of essential content areas.</p> <p>2.6 Craft effective prompts that guide AI toward generating accurate, relevant, and conceptually rich responses, iteratively refining prompts based on output quality, and developing skills in communicating clearly with AI systems to achieve desired learning outcomes.</p> <p>2.7 Generate AI-assisted study aids (e.g., flashcards, summaries, concept maps, practice questions, or case scenarios) to enhance comprehension and retrieval, while ensuring AI-generated materials are accurate, appropriately challenging, and aligned with learning objectives.</p> <p>2.8 Critically appraise all AI-generated content for accuracy, credibility, bias, and alignment with established medical or educational knowledge by cross-referencing with authoritative sources, consulting with faculty or peers, and developing discernment about when AI outputs require verification or correction.</p> <p>2.9 Engage AI as a learning coach to question assumptions, explore reasoning pathways, refine clinical or scientific logic, practice explaining concepts aloud, and receive feedback on thought processes, while maintaining awareness that AI coaching supplements but does not replace human mentorship.</p> <p>2.10 Leverage AI to facilitate collaborative learning with peers through AI-assisted peer review, group problem-solving with AI support, collaborative critique of AI-generated content, and shared exploration of complex topics, recognizing that AI can enhance but not replace peer-to-peer learning relationships.</p>	<p>3.1 Provide learners with access to vetted, secure AI tools and platforms specifically designed to support learning activities, including AI tutoring systems, study assistants, concept exploration tools, and practice question generators, ensuring tools are pedagogically sound and aligned with learning objectives.</p> <p>3.2 Establish and clearly communicate course-specific and institution-wide guidelines for appropriate AI use in learning contexts, including acceptable AI applications for assignments, study activities, exam preparation, and collaborative work, while distinguishing between appropriate learning support and academic dishonesty.</p> <p>3.3 Design course assignments, assessments, and learning activities that intentionally incorporate appropriate AI use, providing explicit guidance on how learners should leverage AI tools to enhance understanding while maintaining academic integrity and developing essential competencies.</p> <p>3.4 Equip faculty with training and resources to guide learners in effective AI use for learning, including strategies for teaching critical AI evaluation, modeling appropriate AI integration, and addressing learner questions about AI use boundaries in academic contexts.</p> <p>3.5 Provide accessible support resources for learners navigating AI use in academic work, including tutorials on effective prompting for learning, examples of appropriate AI integration in assignments, help desk support for AI tool technical issues, and clear pathways for asking questions about AI use policies.</p> <p>3.6 Implement systems to support academic integrity in AI-augmented learning environments, honor code updates, transparent discussions about expectations, and educational approaches that emphasize learning over policing.</p> <p>3.7 Regularly evaluate the effectiveness of AI integration in learning contexts through learner feedback, learning outcome analysis, and assessment of whether AI tools are genuinely enhancing understanding versus enabling shortcuts, using these insights to continuously refine AI implementation strategies.</p>	<p>4.1 Develop and disseminate evidence-based pedagogical guidelines for integrating AI into learning activities, including best practices for AI-enhanced study strategies, appropriate use boundaries across different learning contexts, and frameworks for maintaining academic integrity while leveraging AI tools effectively.</p> <p>4.2 Create model policies and decision-making frameworks for institutions addressing AI use in academic work, including sample use policies, honor code language, course syllabus statements, and approaches for distinguishing between appropriate learning support and academic dishonesty across diverse educational contexts.</p> <p>4.3 Support and coordinate research on AI's impact on learning outcomes, skill development, and knowledge retention, disseminating findings about effective and ineffective AI integration practices, unintended consequences of AI use in learning, and evidence-based recommendations for pedagogical implementation.</p> <p>4.4 Develop and share faculty development resources focused on teaching in AI-augmented environments, including strategies for designing AI-integrated assignments, guiding learners in appropriate AI use, assessing learning when AI tools are available, and adapting pedagogy to leverage AI while preserving critical thinking development.</p> <p>4.5 Facilitate national and regional communities of practice for educators to share innovations, challenges, and lessons learned about AI integration in learning contexts, creating platforms for collaborative problem-solving around common issues such as assessment design, academic integrity, and maintaining educational rigor.</p> <p>4.6 Develop guidance on assessment methods that authentically evaluate learning in AI-augmented environments, including AI-resistant assessment designs, performance-based evaluations, and approaches that assess learners' ability to use AI appropriately as part of their competency demonstration.</p>	<p>5.1 Develop global consensus on principles for AI integration in medical education learning contexts, addressing how to leverage AI to enhance learning while preserving critical thinking, clinical reasoning, and deep understanding across diverse educational systems, cultural contexts, and resource settings.</p> <p>5.2 Establish global frameworks for academic integrity in AI-augmented learning environments, creating internationally-recognized standards that balance appropriate AI use for learning support with protection against academic dishonesty, while acknowledging diverse cultural perspectives on collaboration, individual work, and technology use.</p> <p>5.3 Coordinate multinational research initiatives examining AI's impact on learning outcomes, knowledge retention, skill development, and cognitive processes across diverse educational contexts, ensuring research captures global perspectives and generates evidence applicable to varied healthcare education systems worldwide.</p> <p>5.4 Facilitate international knowledge exchange about effective AI integration in learning contexts through global conferences, virtual communities, collaborative research networks, and shared repositories of best practices, ensuring representation from diverse geographic regions, educational systems, and resource settings.</p> <p>5.5 Address global disparities in access to AI learning tools by developing strategies for equitable AI implementation, creating open-source or low-cost AI educational resources, supporting capacity building in resource-limited settings, and ensuring innovations in AI-enhanced learning benefit all learners regardless of geographic location or institutional resources.</p>



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<p><b>6. AI to Enhance Clinical Skills and Clinical Training</b></p> <p><i>Learners use AI effectively and ethically in patient care, ensuring the human touch remains central in an AI-augmented healthcare environment.</i></p>	<p>1.1 Develop personal awareness of clinical reasoning processes, diagnostic approaches, and decision-making patterns, considering how AI might enhance or potentially interfere with the development of these essential clinical capabilities.</p> <p>1.2 Reflect on the balance between leveraging AI tools for clinical learning and maintaining development of fundamental clinical skills (e.g., physical examination, clinical reasoning, diagnostic thinking) that must remain strong regardless of technological assistance.</p> <p>1.3 Cultivate understanding of how AI can support clinical skill development while recognizing that certain competencies require deliberate human practice, direct patient interaction, and experiential learning that technology cannot fully replicate.</p> <p>1.4 Explore AI-enabled tools for self-assessment of clinical skills, including analysis of clinical reasoning patterns, diagnostic accuracy, and procedural competency development.</p> <p>1.5 Recognize the importance of maintaining core clinical skills to prevent skill decay in AI-augmented practice environments, understanding that technology should enhance rather than replace fundamental clinical capabilities.</p> <p>1.6 Develop awareness of how AI can support personal clinical skill development through wearable technology, real-time feedback systems, and performance analytics.</p>	<p>2.1 Engage with AI-powered clinical learning tools (e.g., virtual patients, diagnostic reasoning exercises, clinical case simulations) to practice clinical skills in safe learning environments, while ensuring these experiences complement rather than substitute for real patient interactions.</p> <p>2.2 Use AI tools to analyze and improve clinical reasoning processes, such as reviewing diagnostic pathways, identifying cognitive biases, or comparing personal approaches with evidence-based guidelines, while maintaining ownership of clinical decision-making.</p> <p>2.3 Leverage AI for deliberate practice of specific clinical skills (e.g., ECG interpretation, radiologic pattern recognition, differential diagnosis generation), using AI feedback to identify areas for improvement while verifying learning through authentic clinical application.</p> <p>2.4 Develop competency in critically evaluating AI-generated clinical suggestions, recommendations, or diagnostic assistance, learning to question outputs, verify findings, consider alternative explanations, and integrate AI input thoughtfully into clinical reasoning rather than accepting it uncritically.</p> <p>2.5 Practice appropriate delegation and collaboration with AI clinical tools, understanding when to use AI assistance, when to rely on independent judgment, and how to maintain clinical competence in both AI-supported and non-AI environments.</p> <p>2.6 Reflect on personal experiences using AI in clinical learning contexts, identifying both benefits and potential concerns, discussing challenges with supervisors and peers, and developing wisdom about effective AI integration in clinical education.</p> <p>2.7 Utilize AI-powered simulation and feedback systems for deliberate practice of clinical skills, including physical examination techniques, procedural skills, and clinical reasoning under supervision.</p> <p>2.8 Engage with AI-enabled wearables and sensing technology that provide objective feedback on technical skill performance, using this data to guide targeted improvement efforts.</p> <p>2.9 Participate in AI-augmented clinical skill assessments that provide detailed performance analytics, identifying specific areas for improvement and supporting longitudinal skill development.</p> <p>2.10 Practice transparent communication with healthcare teams about AI tool usage, including documentation of AI assistance in clinical decision-making when appropriate.</p>	<p>3.1 Integrate AI tools into clinical skills training in ways that enhance learning while preserving essential elements of clinical education, such as patient-centered care, communication skills, and humanistic practice.</p> <p>3.2 Provide clear guidance to learners about appropriate AI use in clinical learning contexts, including when AI tools should and should not be used, how to verify AI-generated clinical information, and how to maintain clinical reasoning skills.</p> <p>3.3 Ensure clinical supervisors and educators are prepared to guide learners in appropriate AI use during clinical training, modeling thoughtful integration and helping learners develop critical evaluation skills.</p> <p>3.4 Design clinical learning experiences that intentionally develop competencies AI cannot replicate, such as empathetic communication, shared decision-making, navigating clinical uncertainty, and building therapeutic relationships.</p> <p>3.5 Monitor how AI tools are impacting learners' clinical skill development, gathering feedback about benefits and concerns, and adjusting integration approaches to ensure essential competencies are maintained.</p> <p>3.6 Provide learners with access to AI-powered clinical skills assessment tools that offer objective feedback, performance tracking, and personalized improvement recommendations.</p> <p>3.7 Implement systematic monitoring of clinical skill maintenance across learner populations using AI analytics to identify skills at risk of decay, enabling targeted interventions to preserve fundamental clinical capabilities.</p>	<p>4.1 Develop competency frameworks that clearly articulate which clinical skills require AI literacy and which fundamental capabilities must be maintained independent of technological assistance.</p> <p>4.2 Create and share evidence-based guidelines for AI integration in clinical skills training, addressing questions about effective use, potential pitfalls, and strategies for maintaining essential competencies.</p> <p>4.3 Foster dialogue among medical education organizations about balancing AI-enhanced clinical learning with preservation of core clinical competencies, humanistic care, and professional identity development.</p> <p>4.4 Support research initiatives examining the impact of AI on clinical skill development, including both benefits and potential concerns about skill degradation or over-reliance on technology.</p> <p>4.5 Promote adoption of AI-enhanced simulation-based medical education, including virtual patients, virtual reality, and augmented reality platforms that provide safe, scalable environments for learners to practice clinical, communication, consultation, and team-working skills with immediate feedback.</p> <p>4.6 Develop standards and evaluation frameworks for AI technologies integrated into clinical simulators and training platforms, ensuring these systems effectively support learning across the full spectrum of clinical competencies including technical skills, communication, professionalism, and interprofessional collaboration.</p> <p>4.7 Facilitate cross-institutional collaboration and research on AI applications in clinical skills education, including systematic evaluation of emerging technologies such as AI-powered coaching systems, virtual reality simulations, and automated performance assessment across diverse clinical scenarios.</p>	<p>5.1 Coordinate international efforts to establish global standards for AI integration in clinical skills training that ensure learners develop both AI competencies and fundamental clinical capabilities across diverse healthcare contexts.</p> <p>5.2 Facilitate global knowledge exchange about effective approaches to clinical skills education in the AI era, including case studies, research findings, and best practices from diverse settings.</p> <p>5.3 Support international research collaborations examining how AI affects clinical skill development across different healthcare systems and educational contexts, generating evidence for global guidelines.</p> <p>5.4 Address global concerns about potential skill degradation or over-reliance on AI in clinical practice through collaborative development of safeguards, competency standards, and educational approaches.</p> <p>5.5 Establish international collaborations for AI-enhanced clinical skills assessment, enabling cross-referencing and corroboration of performance judgments, shared learner data analysis (with appropriate privacy protections), and development of globally validated competency metrics.</p> <p>5.6 Coordinate global efforts toward precision education in clinical training, supporting integration of AI technologies and assessment systems to enable personalized, data-driven learning pathways that adapt to individual learner needs while maintaining international standards.</p> <p>5.7 Promote international exchange of AI-enhanced simulation resources, virtual patient libraries, and virtual reality clinical scenarios, ensuring global access to high-quality clinical skills training technologies and addressing resource disparities across regions.</p> <p>5.8 Develop international frameworks for AI integration in comprehensive clinical skills education encompassing technical procedures, communication, consultation, interprofessional teamwork, and professionalism, recognizing cultural variations while establishing shared principles for AI-augmented clinical training.</p>



# Matrix I: Recommendations for Integrating AI - Learner Focus

Domains and Vision Statements	INTRA-PERSONAL	MICRO	MESO	MACRO	MEGA
<p><b>7. AI for Assessment and Feedback</b></p> <p><i>Learners use AI for effective study habits, such as retrieval practice and case-based learning, resulting in better learning outcomes. Institutions offer a strong ethical framework for responsible AI use in assessments.</i></p>	<p>1.1 Reflect on personal responsibility for academic integrity in an AI-enabled environment, understanding that authentic learning requires genuine cognitive engagement beyond what AI can provide.</p> <p>1.2 Develop awareness of when AI use enhances versus undermines learning, recognizing that over-reliance on AI for assessment or test preparation may create an illusion of competence without genuine skill development.</p> <p>1.3 Understand the distinction between appropriate AI use for learning (e.g., practice questions, self-assessment, studying) versus inappropriate use that compromises assessment integrity or prevents authentic demonstration of competence.</p> <p>1.4 Reflect on how different cultural backgrounds and educational systems may shape varying perspectives on technology's role in learning and assessment, while recognizing universal principles of honesty, fairness, and authentic learning.</p> <p>1.5 Cultivate metacognitive awareness about one's own learning process, regularly assessing whether AI assistance is supporting genuine understanding or creating superficial knowledge that won't translate to clinical competence.</p>	<p>2.1 Use AI tools for formative learning activities such as generating practice questions, self-testing, explaining errors, and creating study materials, while ensuring summative assessments represent authentic personal capability.</p> <p>2.2 Engage transparently with faculty about AI use in academic work, seeking guidance on appropriate applications, disclosing AI assistance when required, and contributing to a culture of trust and educational dialogue.</p> <p>2.3 Document AI use transparently in professional activities by clearly detailing the tool, purpose, prompts used, and how outputs were verified or integrated, adhering to relevant citation standards and reporting requirements.</p> <p>2.4 Practice strategic study habits using AI tools for spaced retrieval practice, case-based learning, and self-assessment while maintaining active engagement that promotes long-term retention and deep understanding.</p> <p>2.5 Engage with AI-powered formative assessment tools to identify knowledge gaps, track learning progress, and receive personalized feedback, using these insights to guide targeted study and skill development.</p> <p>2.6 Participate in discussions with peers and faculty about academic integrity and AI use, collectively developing community norms and understanding of responsible practices that support authentic learning.</p>	<p>3.1 Establish clear, transparent policies regarding AI use in different assessment contexts (e.g. formative, summative, high-stakes exams), communicating expectations clearly and explaining the educational rationale for different policies.</p> <p>3.2 Design assessments that are resilient to AI by incorporating contextualization, justification requirements, reflection prompts, and tolerance for uncertainty—creating tasks that require authentic demonstration of competency beyond what AI can generate.</p> <p>3.3 Provide learners with clear guidance on appropriate AI use in assessments across different contexts, emphasizing the educational rationale for different policies rather than presenting rules as arbitrary restrictions.</p> <p>3.4 Shift from a policing mindset to an empowerment approach, focusing on designing robust, authentic assessments and fostering educational dialogue rather than relying primarily on AI detection tools.</p> <p>3.5 Implement assessment approaches that leverage AI's capabilities while ensuring learners develop and demonstrate essential competencies, such as clinical reasoning under uncertainty, ethical judgment, and integration of complex information.</p> <p>3.6 Provide AI-powered formative assessment tools that support learner self-study, retrieval practice, and personalized feedback, clearly distinguishing these learning resources from summative evaluation contexts.</p> <p>3.7 Engage learners in ongoing dialogue about academic integrity, AI use, and learning authenticity, creating opportunities for collective reflection on how to use AI responsibly while developing genuine competence.</p> <p>3.8 Develop comprehensive academic integrity frameworks that acknowledge AI as a learning partner while setting clear expectations for appropriate use, balancing empowerment with accountability through educational rather than punitive approaches.</p>	<p>4.1 Develop and share evidence-based guidelines for AI use in medical education assessment, including recommendations for policy development, assessment design, and maintaining academic integrity in the AI era.</p> <p>4.2 Create repositories of AI-resilient assessment approaches, including examples of contextualized cases, reflection-based questions, and other formats that require authentic human competencies.</p> <p>4.3 Foster dialogue among medical education organizations about evolving definitions of academic integrity, authorship, and authentic learning in an AI-augmented educational environment.</p> <p>4.4 Support research examining the impact of AI on learning authenticity, assessment validity, and competency development, generating evidence to inform assessment practices and academic integrity policies.</p> <p>4.5 Facilitate inter-institutional collaboration on assessment innovation, enabling institutions to share effective strategies for maintaining rigor and authenticity while embracing AI's potential benefits.</p>	<p>5.1 Convene international stakeholders including learner representatives, assessment specialists, education technologists, and medical educators to develop and continuously update comprehensive frameworks for AI-enhanced assessment and feedback systems that prioritize design over detection, ensure resilience to inappropriate AI use, and adapt across diverse learning environments, cultural contexts, and healthcare education systems.</p> <p>5.2 Establish global guidelines for academic integrity in the AI era that acknowledge varying cultural perspectives on learning and collaboration while maintaining universal principles of honesty, fairness, and authentic learning, providing practical guidance for assessment design that promotes rather than polices integrity.</p> <p>5.3 Coordinate multinational research initiatives examining how AI affects assessment practices, learning authenticity, feedback effectiveness, and competency development across different contexts, generating evidence about what assessment approaches effectively measure genuine learning and clinical readiness in AI-augmented environments.</p> <p>5.4 Foster strategic international partnerships among assessment developers, AI specialists, educational researchers, and medical educators to advance ethical, evidence-based practices for AI-enhanced assessment tools and feedback systems, ensuring quality, validity, and educational effectiveness across diverse global settings.</p> <p>5.5 Address global disparities in access to AI-enhanced assessment technologies by supporting capacity building in resource-limited settings through scalable, low-cost assessment solutions, open-access feedback tools, and knowledge transfer partnerships, ensuring innovations enhance rather than exacerbate educational inequities.</p> <p>5.6 Establish mechanisms ensuring authentic learner voice in international assessment framework development through formal learner representation on governing bodies, systematic collection of learner perspectives on AI-enhanced assessment experiences across diverse contexts, and incorporation of learner insights into continuous refinement of assessment standards and integrity frameworks.</p>



# Matrix I: Recommendations for Integrating AI - Learner Focus

Domains and Vision Statements	INTRA-PERSONAL	MICRO	MESO	MACRO	MEGA
<p><b>8. AI for Admissions, Mentorship, and Post-Graduate Selection</b></p> <p><i>AI-powered systems are used to support the application and selection process through improved coaching, mentorship, and transparency. Learners are expected to leverage these tools responsibly and ethically while upholding rigorous standards and recognizing human oversight.</i></p>	<p>1.1 Explore how AI tools can support career exploration, specialty selection, and professional development planning through access to information, self-assessment resources, and personalized guidance while recognizing the importance of human mentorship and experiential learning.</p> <p>1.2 Reflect on personal career values, interests, strengths, and goals, using AI tools to facilitate self-reflection and explore options while maintaining agency over career decisions rather than delegating choices to algorithms.</p> <p>1.3 Understand the appropriate and inappropriate uses of AI in application and selection processes, recognizing where AI assistance supports preparation versus where it compromises process integrity or creates unfair advantages.</p> <p>1.4 Develop awareness of potential biases in AI-powered career guidance systems and algorithmic selection processes, understanding how these technologies might perpetuate inequities or make assumptions that don't apply to individual circumstances.</p> <p>1.5 Cultivate critical thinking about AI-generated career recommendations, recognizing that algorithms may not fully account for personal values, unique circumstances, evolving interests, or the human dimensions of career satisfaction.</p> <p>1.6 Commit to upholding integrity in AI-augmented selection processes, including online interviews, by engaging authentically without real-time AI assistance and representing oneself honestly throughout the application process.</p> <p>1.7 Recognize the ethical responsibility not to share selection process materials, including interview questions, written prompts, or institution-specific content, with peers or AI systems, understanding this protects process validity and upholds professional integrity.</p> <p>1.8 Reflect on the difference between appropriate AI use for preparation (e.g. researching institutions, practicing general interview skills, reflecting on experiences) versus inappropriate use that compromises process integrity (e.g. real-time AI assistance, sharing privileged information, misrepresenting capabilities).</p>	<p>2.1 Use AI tools to explore career options, research specialties, understand training pathways, and gather information about different practice settings, using this information to inform personal career planning discussions with mentors and advisors.</p> <p>2.2 Engage with AI-powered self-assessment tools to gain insights into personal strengths, interests, and potential career fits, while recognizing these tools provide limited perspectives that should complement rather than replace human guidance and self-reflection.</p> <p>2.3 Leverage AI for practical career preparation tasks such as reviewing application materials, practicing interview skills, or exploring residency program information, while maintaining authenticity and ensuring final products represent genuine personal voice and experiences.</p> <p>2.4 Seek guidance from human mentors, advisors, and senior colleagues about career decisions, using AI-generated information as one input among many but prioritizing relationships with people who understand individual circumstances and can provide contextual wisdom.</p> <p>2.5 Participate in career development programs that thoughtfully integrate AI tools, providing feedback about what supports authentic career exploration versus what feels impersonal, algorithmic, or disconnected from individual needs.</p> <p>2.6 Practice transparency with career advisors and mentors about AI use in career planning processes, discussing how AI tools are being used and seeking guidance about appropriate applications.</p> <p>2.7 Prepare for selection processes by using AI appropriately for self-reflection, application material development, and general skill-building, while maintaining clear boundaries against real-time assistance or integrity violations.</p> <p>2.8 Engage with AI-powered preparation tools (e.g. mock interviews, application review, career exploration) in ways that develop genuine capability rather than creating false impressions of competency or experience.</p>	<p>3.1 Provide learners with access to AI-powered career exploration and planning tools that are evidence-based, free from significant bias, transparent about limitations, and designed to support rather than replace human advising relationships.</p> <p>3.2 Ensure career advising services integrate AI tools thoughtfully, using technology to enhance rather than replace personalized human guidance, mentorship, and the relationship-based support that learners need for career development.</p> <p>3.3 Train learners in critical evaluation of AI career guidance, helping them understand algorithmic limitations, potential biases, and the importance of balancing AI input with self-reflection, human mentorship, and experiential learning.</p> <p>3.4 Establish clear policies and guidance regarding AI use in application and selection processes, communicating expectations for appropriate use and consequences for integrity violations while supporting learners in understanding boundaries.</p> <p>3.5 Monitor AI-augmented career advising and selection processes for bias, inequity, or unintended consequences, implementing safeguards to ensure fair treatment of all learners regardless of background or circumstances.</p> <p>3.6 Provide adequate human career advising and mentorship capacity alongside AI tools, ensuring technology augments rather than substitutes for the personalized guidance learners need for career development.</p>	<p>4.1 Provide evidence-based professional development workshops and training resources demonstrating best practices for integrating AI tools into admissions applications and career planning processes while ensuring transparency, fairness, and appropriate human oversight.</p> <p>4.2 Develop and disseminate standardized protocols and frameworks for AI-augmented admissions and selection processes, addressing algorithmic transparency, bias detection and mitigation, privacy protection, and equitable implementation across diverse institutional contexts and medical education systems.</p> <p>4.3 Establish standards for algorithmic transparency in AI-supported admissions and selection processes, ensuring that institutions can explain and justify AI-assisted decisions to applicants and regulatory bodies.</p> <p>4.4 Develop frameworks for systematically auditing AI systems used in candidate evaluation to ensure fairness, validity, and equity, with clear protocols for addressing identified biases or performance issues.</p> <p>4.5 Create collaborative networks among member institutions to share best practices, research findings, and emerging challenges related to AI integration in admissions and selection processes.</p>	<p>5.1 Coordinate the development of globally recognized standards and ethical frameworks for AI use in admissions, selection, mentorship, and career planning that accommodate diverse cultural contexts, legal systems, and educational models while promoting equity, transparency, and human-centered decision-making across global medical education systems.</p> <p>5.2 Develop collaborative global platforms for sharing research, tracking innovations, and analyzing trends in AI-driven admissions and career planning, creating accessible repositories of evidence-based practices, implementation case studies, and evaluation frameworks that support continuous learning across diverse institutional contexts.</p> <p>5.3 Coordinate global research initiatives to evaluate the impact of AI integration in medical education admissions and selection on workforce outcomes across different healthcare systems and cultural contexts.</p> <p>5.4 Develop comprehensive global ethical guidelines for AI use in cross-border medical education pathways and international student selection, addressing issues such as data privacy, algorithmic fairness, and cultural sensitivity.</p> <p>5.5 Foster global collaboration networks focused on developing and validating AI tools for admissions and selection that are culturally responsive, equitable, and aligned with diverse healthcare system needs.</p>



# Matrix I: Recommendations for Integrating AI - Learner Focus

Domains and Vision Statements	INTRA-PERSONAL	MICRO	MESO	MACRO	MEGA
<p><b>9. AI for Curricular Optimization and Program Evaluation</b></p> <p><i>AI assists with curriculum analytics, educational content optimization, and program evaluation, ensuring a more effective and tailored learning experience.</i></p>	<p>1.1 Develop awareness of how the institution uses learner data and AI analytics for curriculum improvement, program evaluation, and educational research, understanding both the benefits for institutional enhancement and privacy considerations.</p> <p>1.2 Recognize the value of providing authentic feedback and engagement data to support evidence-based curriculum refinement, understanding that honest learner perspectives contribute to improving educational quality for current and future students.</p> <p>1.3 Reflect on personal comfort with different types of data sharing, considering what information one is willing to contribute to institutional improvement efforts and what privacy boundaries are important personally.</p> <p>1.4 Consider personal willingness to share learning data and engagement metrics with educational programs to enable AI-powered curriculum analysis, program evaluation, and educational research, understanding both the benefits for institutional improvement and the importance of privacy protections.</p> <p>1.5 Reflect on the balance between privacy concerns and the collective benefit of contributing data to improve educational programs, recognizing that aggregated learner data can identify curriculum gaps, optimize learning pathways, and advance medical education research.</p> <p>1.6 Reflect on personal learning patterns and preferences to better leverage AI-powered curricular recommendations.</p>	<p>2.1 Provide thoughtful, honest feedback when the institution seeks learner input on curriculum, teaching effectiveness, or educational experiences, recognizing this feedback informs AI-augmented program improvement efforts.</p> <p>2.2 Engage authentically with AI-enhanced learning experiences, understanding that interaction data (e.g., time spent, resources accessed, common challenges) helps institutions identify what works well and what needs improvement.</p> <p>2.3 Participate in program evaluation activities, surveys, or research studies about AI integration and curriculum effectiveness when invited, understanding individual contributions to collective knowledge about effective medical education.</p> <p>2.4 Maintain honest engagement with learning materials and assessments, recognizing that authentic learner behavior informs evidence-based curriculum decisions.</p> <p>2.5 Communicate concerns or suggestions about curriculum directly to appropriate faculty or administrators, providing specific feedback that can inform meaningful improvements rather than passive dissatisfaction.</p> <p>2.6 Make informed decisions about participation in AI-enhanced curriculum evaluation and educational research, understanding data collection practices, privacy protections, and how learner feedback and performance data contribute to program improvement.</p> <p>2.7 Provide authentic engagement data and thoughtful feedback on AI-enhanced curriculum elements, recognizing that honest learner perspectives are essential for evidence-based refinement of AI integration approaches.</p>	<p>3.1 Use AI analytics to identify curriculum gaps, redundancies, or areas where learners consistently struggle, enabling evidence-based curriculum refinement and more effective educational experiences.</p> <p>3.2 Implement AI-powered learning analytics that provide insights into learner engagement, performance patterns, and educational outcomes, using these insights to continuously improve curriculum and teaching approaches.</p> <p>3.3 Engage learners transparently in curriculum evaluation processes, explaining how their feedback and performance data inform program improvements while protecting individual privacy and ensuring aggregated analysis.</p> <p>3.4 Design AI-augmented program evaluation systems that capture meaningful educational outcomes beyond easily quantified metrics, ensuring evaluation includes learning quality, professional development, and humanistic dimensions of medical education.</p> <p>3.5 Ensure ethical use of learner data in AI-powered curriculum analytics, with clear policies about what data is collected, how it's analyzed, who has access, and how findings contribute to educational improvement.</p> <p>3.6 Establish transparent data governance policies that protect learner privacy while enabling curriculum optimization, clearly communicating what data is collected, how it's used, and how findings contribute to program improvement and research.</p> <p>3.7 Create opt-in opportunities for learners to participate in AI-enhanced educational research, ensuring informed consent, data protection, and clear benefit communication while respecting those who choose not to participate.</p>	<p>4.1 Develop and disseminate comprehensive guidelines for ethical use of learner data in AI-powered curriculum analytics and program evaluation, establishing clear standards that balance educational improvement with privacy protection, informed consent, data security, learner autonomy, and transparency about how learner data informs curricular decisions.</p> <p>4.2 Create evidence-based frameworks for AI-augmented program evaluation that capture meaningful educational outcomes including critical thinking, clinical reasoning, and professional development while avoiding over-reliance on easily quantified metrics, ensuring evaluation approaches reflect true educational quality and alignment with institutional missions and accreditation requirements.</p> <p>4.3 Foster ongoing dialogue among curriculum leaders, accreditation bodies, assessment experts, data scientists, and learner representatives about evolving standards for AI use in curriculum optimization, addressing questions about responsible implementation, quality assurance, and maintaining educational integrity in AI-enhanced learning environments.</p> <p>4.4 Facilitate inter-institutional collaboration and knowledge exchange networks for sharing curriculum analytics methodologies, evaluation frameworks, implementation lessons, and evidence about effective AI integration approaches while establishing protocols that protect institutional intellectual property and learner confidentiality.</p> <p>4.5 Support and disseminate research examining how AI-powered curriculum analytics and adaptive learning systems affect educational quality, equity of access, learning outcomes, and learner experiences across diverse contexts, generating an evidence base for responsible curricular optimization practices.</p>	<p>5.1 Convene international stakeholders including learner representatives, curriculum developers, educational leaders, data scientists, assessment experts, and accreditation representatives to develop and continuously update frameworks for AI-enhanced curriculum planning, delivery, and evaluation that balance innovation with pedagogical soundness across diverse educational systems and cultural contexts worldwide.</p> <p>5.2 Coordinate multinational research initiatives examining the effectiveness, equity impacts, learning outcomes, and unintended consequences of AI-powered adaptive curricula and personalized learning systems across diverse medical education contexts, generating evidence about what works for whom, under what conditions, and with what resource requirements.</p> <p>5.3 Develop global benchmarking frameworks and common metrics for evaluating AI-enhanced curricular innovations while respecting diverse educational philosophies, cultural contexts, and resource environments, enabling meaningful comparison of outcomes across institutions without imposing standardization that undermines local autonomy or educational diversity.</p> <p>5.4 Create and maintain open-access international repositories and collaborative platforms for sharing evidence-based curricular optimization practices, AI implementation case studies, evaluation methodologies, and lessons learned across different educational and healthcare contexts, ensuring global accessibility of high-quality resources for all institutions.</p> <p>5.5 Address global disparities in capacity for AI-driven curricular optimization by supporting institutions in resource-limited settings through development of scalable, low-cost solutions, knowledge transfer partnerships, shared infrastructure initiatives, and ensuring curricular innovations remain accessible regardless of technological sophistication or financial resources.</p> <p>5.6 Establish mechanisms ensuring authentic learner voice in international curricular optimization frameworks through formal learner representation in development bodies, systematic collection of learner experiences with AI-enhanced curricula across diverse contexts, and incorporation of learner perspectives into continuous refinement of frameworks, metrics, and implementation guidance.</p>



# Matrix I: Recommendations for Integrating AI - Learner Focus

Domains and Vision Statements	INTRA-PERSONAL	MICRO	MESO	MACRO	MEGA
<p><b>10. AI for Research and Research Mentorship</b></p> <p><i>Learners ethically engage with AI to enhance research, ensuring a thorough understanding of the responsibilities and implications involved in AI-augmented scientific work.</i></p>	<p>1.1 Develop awareness of how AI tools can support various aspects of research (e.g., literature review, data analysis, writing assistance, hypothesis generation) while understanding their limitations and the irreplaceable role of human creativity, critical thinking, and domain expertise.</p> <p>1.2 Recognize ethical responsibilities when using AI in research, including requirements for transparency about AI use, verification of AI-generated content, protection of intellectual property, and honest representation of contributions to scholarly work.</p> <p>1.3 Understand principles of responsible conduct of research as they apply to AI use, including data integrity, attribution, reproducibility, and the distinction between AI assistance versus AI-generated work that requires different levels of disclosure.</p> <p>1.4 Reflect on how AI might impact the development of research skills, considering which competencies require deliberate human practice and cannot be delegated to AI without undermining scholarly development.</p> <p>1.5 Cultivate awareness of bias in AI systems and how this might affect research, including biased training data, algorithmic assumptions, or outputs that reflect or perpetuate existing inequities in medical knowledge.</p> <p>1.6 Recognize the risk of epistemia (illusion of knowledge) when using AI for research, understanding that AI-generated synthesis may create false confidence in understanding without genuine expertise, and develop metacognitive awareness of when AI enhances versus substitutes for deep learning.</p> <p>1.7 Commit to developing genuine scholarly depth in research areas, using AI to accelerate but not replace the deep engagement required for original contribution, understanding that research involves the creation of new knowledge rather than superficial breadth.</p>	<p>2.1 Use AI tools to enhance research efficiency for appropriate tasks (e.g., literature searching, organizing references, identifying patterns in data, drafting methods sections) while maintaining personal responsibility for critical analysis, interpretation, and scholarly integrity.</p> <p>2.2 Develop competency in critically evaluating AI-generated research outputs, including verifying factual accuracy, checking for hallucinations or fabricated citations, assessing methodological soundness, and ensuring conclusions are appropriately supported.</p> <p>2.3 Practice transparent documentation of AI use in research, clearly indicating what tools were used, for what purposes, how outputs were verified, and distinguishing between AI-assisted work and human-generated contributions.</p> <p>2.4 Engage with research mentors about appropriate AI use in scholarly work, seeking guidance on emerging practices, institutional requirements, and ethical considerations specific to research context.</p> <p>2.5 Participate in discussions about AI's impact on research practices, contributing to evolving professional norms about appropriate use, transparency standards, and ethical considerations in AI-augmented scholarship.</p> <p>2.6 Develop strategies for maintaining research skill development while using AI tools, ensuring technology enhances rather than replaces growth in critical appraisal, analytical thinking, scientific writing, and domain expertise.</p> <p>2.7 Use AI as a tool for deepening understanding rather than replacing intellectual work, ensuring AI-augmented research reflects authentic comprehension, critical analysis, and original thinking rather than sophisticated compilation.</p> <p>2.8 Develop strategies to verify and validate AI-generated research outputs through independent investigation, cross-referencing primary sources, and engaging with domain experts to ensure genuine understanding.</p>	<p>3.1 Establish comprehensive AI research training programs that integrate both technical competencies (data science fundamentals, statistical reasoning, critical interpretation of AI-generated insights) and ethical foundations (responsible conduct of research, transparency obligations, discipline-specific norms for AI-augmented scholarship).</p> <p>3.2 Develop and regularly update clear institutional policies governing AI use in learner research that address authorship attribution, data management protocols, transparency requirements, research ethics review processes, and academic integrity standards, ensuring these policies remain current with evolving journal requirements and scholarly norms.</p> <p>3.3 Provide learners with access to research-specific AI tools, data science platforms, computing resources, and software, accompanied by technical support and practical guidance on tool selection appropriate for specific research questions and methodologies.</p> <p>3.4 Build institutional capacity for effective research mentorship by ensuring supervisors are prepared to guide learners in responsible AI use, pairing learners with faculty experienced in AI-augmented research, and providing mentors with ongoing professional development about emerging tools, potential pitfalls, and effective supervision strategies.</p> <p>3.5 Implement transparent documentation systems requiring that all AI-augmented research maintains clear records of AI tool use throughout data collection, analysis, and reporting phases, ensuring reproducibility and trustworthiness while supporting standard data practices and verification processes.</p> <p>3.6 Create safe, judgment-free mechanisms for learners to seek guidance about challenging AI research situations, raise concerns about appropriate practices, and engage in open dialogue about ethical ambiguities, while actively monitoring emerging issues (e.g. detection methods, policy changes, reproducibility concerns) and updating learner guidance accordingly.</p> <p>3.7 Foster an institutional research culture that prioritizes authentic intellectual contribution, critical thinking, and genuine scholarly expertise over superficial productivity metrics, ensuring learners understand that appropriate AI use enhances rather than replaces rigorous scientific thinking and personal accountability for research integrity.</p>	<p>4.1 Develop and regularly update comprehensive guidelines for responsible AI use in medical education research, addressing appropriate applications, transparency requirements, authorship attribution, reproducibility standards, and ethical considerations.</p> <p>4.2 Foster ongoing dialogue among researchers, educators, editors, reviewers, and learners about evolving standards for AI-augmented scholarship through conferences, working groups, and collaborative forums.</p> <p>4.3 Create standardized, adaptable curricula and shared educational resources for teaching AI-enhanced research methods, including data science fundamentals, ethical frameworks, and practical guidance for common research tasks.</p> <p>4.4 Establish evidence-based frameworks for evaluating the quality and ethical standards of AI-augmented scholarship, providing clear guidance for authors, reviewers, editors, and research ethics committees.</p> <p>4.5 Support and disseminate research examining AI's impact on scholarly work, including both benefits and concerns, to generate an evidence base for evolving best practices.</p> <p>4.6 Create collaborative networks for sharing research training resources, addressing common implementation challenges, and building collective capacity to adapt to rapid changes in AI capabilities and publishing requirements.</p>	<p>5.1 Convene international stakeholders including learner representatives, research mentors, ethicists, journal editors, and funding agencies to develop and continuously update ethical guidelines for AI use in medical education research, addressing transparency, attribution, reproducibility, data privacy across jurisdictions, and scholarly integrity while remaining applicable across diverse regulatory environments and academic cultures.</p> <p>5.2 Coordinate multinational research initiatives examining how AI affects research quality, accessibility, equity, skill development, and knowledge creation, generating evidence about benefits and risks that reflects global diversity and informs continuous refinement of AI-augmented scholarship practices.</p> <p>5.3 Develop and maintain international standards for transparent reporting of AI use in medical research publications, working with major journals and publishers to establish consistent expectations for documenting AI tool use, verification processes, and authentic intellectual contribution across diverse research contexts.</p> <p>5.4 Foster interdisciplinary global research consortia among medical educators, data scientists, AI developers, ethicists, and researchers to facilitate knowledge exchange, capacity building, joint initiatives, and development of shared resources advancing responsible AI-augmented research worldwide.</p> <p>5.5 Address global disparities in AI research capacity by supporting development in resource-limited settings through open-access training materials, low-cost computational resources, knowledge transfer partnerships, and equitable distribution of AI tools and expertise, ensuring all learners can develop research competencies regardless of institutional resources or location.</p> <p>5.6 Establish mechanisms ensuring authentic learner voice in international AI research frameworks through formal representation in guideline development, systematic collection of learner perspectives across diverse contexts, and incorporation of learner insights into evolving standards, ethical frameworks, and educational resources.</p>



# Matrix I: Recommendations for Integrating AI - Learner Focus

Domains and Vision Statements	INTRA-PERSONAL	MICRO	MESO	MACRO	MEGA
<p><b>II. AI-Ready Workforce</b></p> <p><i>An AI-ready environment supports learners in strategically developing AI competencies to adapt their professional identity and advance their career trajectory in evolving healthcare practice.</i></p>	<p>1.1 Articulate ways AI technology trends will reshape one's professional role, daily practice, and ethical responsibilities as a future healthcare provider.</p> <p>1.2 Explore and evaluate how developing AI competencies can strengthen one's career preparation, including specialty selection, extracurricular engagement, leadership development, and scholarly activities.</p> <p>1.3 Recognize the necessity of lifelong learning and continuous upskilling to adapt expertise and maintain readiness for evolving AI and technology trends in healthcare.</p> <p>1.4 Accept that AI competencies require continuous learning, unlearning, and relearning at an unprecedented pace, recognizing that skills currently mastered may soon be outdated and that this is both normal and expected in AI-augmented healthcare practice.</p> <p>1.5 Develop a mindset of continuous adaptation regarding AI capabilities, understanding that professional excellence requires staying current with rapidly evolving technologies while maintaining core clinical and humanistic competencies that transcend specific tools.</p>	<p>2.1 Develop and maintain a strategic career preparation plan that incorporates AI competencies, setting regular, measurable goals informed by specialty-specific requirements, institutional resources, and evolving healthcare technology trends.</p> <p>2.2 Actively seek and participate in structured professional development opportunities (e.g., workshops, certification courses, specialized rotations, AI-focused electives) to build, validate, and systematically document AI-related skills through portfolios, competency checklists, or certification records relevant to their specialty.</p> <p>2.3 Engage in cross-disciplinary learning opportunities with data scientists, health informaticists, ethicists, and technology specialists to broaden understanding of AI's role across healthcare and enhance workforce readiness.</p> <p>2.4 Cultivate habits of continuous AI learning by regularly exploring emerging tools, updated capabilities, and evolving best practices, while maintaining flexibility to unlearn obsolete approaches and adapt to new paradigms.</p> <p>2.5 Build a strategic professional network focused on AI in healthcare by connecting with relevant experts, mentors, peers, and professionals, joining AI-focused student organizations, attending conferences/workshops, participating in online communities, and seeking diverse perspectives on AI's integration in clinical practice and medical education.</p> <p>2.6 Develop a professional portfolio of AI competencies, experiences, and scholarly activities (i.e., training, certifications, AI-enhanced projects/research, clinical use of AI tools, reflections on AI integration, and contributions to AI discussions) to tangibly demonstrate readiness for AI-augmented healthcare, aiding residency applications and career advancement.</p> <p>2.7 Actively engage in AI-related extracurriculars, such as student-led innovation, special interest groups, medical education technology committees, AI-focused quality improvement, peer teaching on AI, or collaborative research on AI's healthcare impact, demonstrating initiative in applying and advancing AI knowledge, while contributing to institutional/professional AI integration.</p>	<p>3.1 Ensure learners have access to clear AI competency frameworks developed in collaboration with clinical partners, outlining essential AI-related skills for various specialties and clinical practice settings.</p> <p>3.2 Provide structured professional development pathways (e.g., elective courses, certification programs, specialized rotations, AI-focused tracks) that systematically prepare learners for AI integration in their future specialty and practice setting.</p> <p>3.3 Recruit and integrate faculty and staff with current AI expertise into teaching, mentorship, and clinical supervision roles, ensuring learners receive authentic, high-quality exposure to AI applications in contemporary practice.</p> <p>3.4 Foster and facilitate opportunities for learners to engage in cross-disciplinary initiatives with technology, ethics, and data science experts to advance their professional readiness.</p> <p>3.5 Establish institutional cultures that normalize continuous learning, unlearning, and relearning about AI, recognizing that rapid technological evolution demands sustained adaptation from both learners and educators.</p>	<p>4.1 Develop and disseminate AI competency maps demonstrating how AI technologies apply to each specialty.</p> <p>4.2 Create educational frameworks that distinguish between cross-cutting AI competencies (e.g., data literacy, algorithmic reasoning, ethical discernment) and specialty-specific AI skills to guide learner career preparation.</p> <p>4.3 Foster national dialogue and provide resources supporting learners' professional identity formation in an AI-augmented healthcare environment, including reflective frameworks addressing questions such as 'What kind of physician do I want to be as AI transforms medical practice?'</p> <p>4.4 Establish national workforce readiness standards that outline baseline and advanced AI competencies expected of graduates across all specialties, ensuring consistency in preparation while allowing for specialty-specific enhancement.</p> <p>4.5 Support development of continuous professional development frameworks that acknowledge the accelerated pace of AI evolution and provide guidance for ongoing learning throughout medical careers.</p>	<p>5.1 Establish international AI knowledge management systems that systematically track, synthesize, and disseminate emerging developments, research, and best practices in AI-augmented career planning and workforce development for learners across diverse healthcare contexts.</p> <p>5.2 Convene diverse international stakeholder groups (e.g., educators, AI platform developers, psychologists, learner specialists and learner representatives) to collaboratively design, pilot, and continuously refine AI-driven career planning tools that accommodate diverse cultural contexts and healthcare systems.</p> <p>5.3 Foster global knowledge exchange networks and collaborative initiatives focused on sharing best practices, addressing common challenges, and advancing the responsible integration of AI-powered career development solutions.</p> <p>5.4 Develop international standards for AI-augmented workforce development in medical education, including guidelines for equitable access to AI career tools, competency validation across borders, and ethical use of AI in learner career advising and professional development.</p> <p>5.5 Coordinate global efforts to address the challenge of continuous learning, unlearning, and relearning in an era of rapid AI evolution, developing frameworks and support systems that enable sustained adaptation throughout medical careers.</p>



# Matrix I: Recommendations for Integrating AI - Learner Focus

Domains and Vision Statements	INTRA-PERSONAL	MICRO	MESO	MACRO	MEGA
<p><b>12. AI for Health and Wellbeing</b></p> <p><i>AI technologies support learner wellbeing by promoting work-life balance, fostering resilience, and providing tools for health monitoring and navigating the challenges of technological change in medical education.</i></p>	<p>1.1 Reflect on personal wellbeing needs and challenges in medical education, exploring how AI tools might support time management, stress reduction, and work-life balance while recognizing that technology alone cannot replace human connection, rest, and self-care practices.</p> <p>1.2 Develop awareness of available AI-powered wellbeing resources including schedule optimization tools, meditation and mindfulness apps, sleep tracking, fitness monitoring, and stress management applications, understanding both their potential benefits and limitations.</p> <p>1.3 Recognize and acknowledge the emotional aspects of AI integration in medical education, including feelings of uncertainty about changing learning methods, concerns about technology dependence, anxiety about AI's role in future practice, and the stress of adapting to rapidly evolving technologies.</p> <p>1.4 Cultivate personal values and boundaries around technology use for wellbeing, recognizing when constant monitoring or optimization becomes counterproductive and maintaining awareness of the importance of unplugging, reflection, and human connection.</p>	<p>2.1 Strategically use AI tools to optimize personal schedules, workload management, and study planning, creating sustainable routines that protect time for sleep, relationships, physical health, and activities that bring joy and meaning beyond medical education.</p> <p>2.2 Thoughtfully experiment with AI-powered wellbeing applications and wearable technology for health monitoring, stress management, and fitness tracking while remaining mindful of potential drawbacks including monitoring-related stress, privacy concerns, and technology dependence.</p> <p>2.3 Develop personal resilience strategies and adaptive coping mechanisms for managing ongoing technological changes in medical education, recognizing when to seek support from peers, mentors, or mental health professionals when feeling overwhelmed by change or academic demands.</p> <p>2.4 Build and actively participate in peer support networks for discussing experiences with AI integration, sharing both challenges and successes in navigating technological transitions, and providing mutual support around the unique stressors of AI-augmented medical education.</p> <p>2.5 Practice intentional disconnection from technology, establishing healthy boundaries around AI tool use, protecting time for rest and reflection, and maintaining awareness of how technology affects personal wellbeing and learning effectiveness.</p> <p>2.6 Engage in ongoing self-assessment of wellbeing and learning sustainability, using both AI analytics and personal reflection to identify early signs of stress or burnout and proactively adjust study habits, workload, and self-care practices.</p>	<p>3.1 Integrate evidence-based AI-enabled wellbeing tools into the curriculum that meaningfully support learner resilience, mental health, stress management, and work-life balance throughout medical training, ensuring these tools enhance rather than add to learner burden.</p> <p>3.2 Provide accessible, optional training and resources on AI-powered wellbeing applications, ensuring all learners can benefit regardless of prior technology experience, personal preferences, or concerns about digital wellbeing monitoring.</p> <p>3.3 Implement institutional systems using AI analytics to monitor aggregated wellbeing metrics and identify patterns indicating student stress or burnout, enabling early intervention while protecting individual privacy and ensuring learners control their personal health data.</p> <p>3.4 Foster a supportive learning culture that explicitly addresses the emotional and psychological aspects of AI integration, providing resources for managing technology-related anxiety, normalizing feelings of uncertainty, and promoting human connection and mentorship alongside AI tools.</p> <p>3.5 Establish clear policies ensuring equity, privacy, informed consent, and ethical use of all wellbeing-related AI applications, protecting learner data from inappropriate use, ensuring voluntary participation in monitoring programs, and guaranteeing equal access to wellbeing tools across diverse student populations.</p> <p>3.6 Create institutional support structures including counseling services, peer support programs, and faculty mentorship that help learners navigate the psychological challenges of technology-intensive medical education while maintaining professional identity development and humanistic values.</p> <p>3.7 Design curriculum and assessment systems that minimize unnecessary stress, avoid creating pressure to use AI for productivity at the expense of wellbeing, and explicitly protect time for rest, reflection, and non-academic pursuits essential for sustainable medical education.</p>	<p>4.1 Develop and disseminate comprehensive, evidence-based guidelines for implementing AI-enabled wellbeing tools in medical education that balance technological innovation with learner autonomy, privacy protection, and recognition that wellbeing requires human connection and institutional culture change beyond technological solutions.</p> <p>4.2 Foster ongoing dialogue among student wellbeing experts, mental health professionals, medical educators, technology developers, and learner representatives about responsible use of AI for learner health, addressing both opportunities and risks including surveillance concerns, equity of access, and potential for technology to exacerbate rather than alleviate stress.</p> <p>4.3 Support and disseminate research examining how AI-powered wellbeing tools affect learner mental health, burnout, and learning outcomes across diverse contexts, generating evidence about what works, for whom, and under what conditions, including potential unintended consequences.</p> <p>4.4 Create collaborative platforms and networks for sharing wellbeing intervention strategies, implementation experiences, evaluation methodologies, and lessons learned about AI integration that supports rather than undermines learner mental health and work-life balance.</p> <p>4.5 Advocate for medical education policies and accreditation standards that prioritize learner wellbeing, ensure adequate rest and reasonable workloads, and prevent misuse of AI productivity tools to intensify rather than alleviate the demands of medical training.</p> <p>4.6 Establish ethical frameworks for institutional use of AI analytics in monitoring learner wellbeing that protect privacy, ensure transparency about data use, require informed consent, and prevent wellbeing data from being used punitively or in evaluation decisions.</p>	<p>5.1 Convene international stakeholders including learner representatives, mental health experts, medical educators, ethicists, technology developers, and wellbeing researchers to develop and continuously update comprehensive frameworks for AI-supported learner wellbeing that address global challenges including burnout, mental health crises, and sustainable medical education while respecting diverse cultural perspectives on health, technology, and work-life balance.</p> <p>5.2 Coordinate multinational research initiatives examining the effectiveness, equity implications, and potential risks of AI-powered wellbeing interventions across different cultural contexts, educational systems, and resource settings, generating evidence about how technology can genuinely support learner mental health without creating new burdens or surveillance concerns.</p> <p>5.3 Develop international ethical guidelines and standards for AI applications in learner wellbeing that balance innovation with privacy protection, ensure voluntary participation, prevent misuse of wellbeing data, and maintain human-centered approaches recognizing that technology cannot replace supportive relationships, institutional culture change, and systemic reforms addressing root causes of learner distress.</p> <p>5.4 Address global disparities in access to wellbeing resources by supporting development of scalable, culturally-adapted, low-cost or open-source AI-powered wellbeing tools, facilitating knowledge transfer about effective interventions, and ensuring technological solutions enhance rather than exacerbate inequities in learner support across different resource settings.</p> <p>5.5 Foster international knowledge exchange networks focused on learner wellbeing in AI-augmented medical education, facilitating sharing of research findings, intervention strategies, policy approaches, and innovative practices that address burnout, promote resilience, and support sustainable learning environments across diverse countries and healthcare education systems.</p> <p>5.6 Establish mechanisms ensuring authentic learner voice in international wellbeing framework development through formal learner representation on governing bodies, systematic collection of learner perspectives on technology-enabled wellbeing interventions across diverse cultural contexts, and incorporation of learner insights about what genuinely supports mental health versus what creates additional stress or surveillance concerns.</p>

