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Live&Learn

THE world is changing rapidly, with social and environmental landscapes shifting at a pace that is difficult to keep up with. At the institutional level, this can be even more challenging.

Change, however, is not only inevitable – it must be faced head-on.

Hospitals and other healthcare institutions are already hard-pressed to meet the demands of a rapidly ageing population burdened by a host of chronic health conditions.

Clearly, healthcare systems need to evolve to meet these demands, and artificial intelligence (AI) can bring much-needed transformation to this essential service.

As educators, we need to ensure that we are preparing students for this future.

New frontier

Digitalisation in healthcare is well underway, and AI has vast potential to enhance diagnostics optimisation, enable predictive analytics and precision medicine, and personalise care.

AI is also proving to be a valuable tool for automating administrative tasks and streamlining operations, improving patient engagement, and enhancing resource allocation and overall efficiency.

These are not vague promises – there are measurable benefits.

AI and the future of healthcare

Educators must prepare students to meet changes head-on

Studies indicate that AI can improve hospital efficiency by reducing patient wait times by 15% to 20% and reduce doctors' administrative burden by 45%, allowing more time for patient care.

Additionally, AI can predict hospital readmissions with over 80% accuracy, demonstrating its transformative impact across clinical and operational domains.

Meanwhile, estimated cost savings are substantial. In the United States, AI is projected to save the healthcare system up to US\$150bil (RM636.6bil) annually by 2026.

What we're doing

The adoption of AI-based applications in Malaysian healthcare settings is already in progress.

Our Health Ministry, via its Malaysian Health Technology Assessment Section, is evaluating AI tools for a wide range of uses, such as in radiology and diagnostics to enhance early detection of cancer, tuberculosis and Covid-19 related conditions.

In addition, public health clinics are piloting AI tools for lung cancer screening, enabling general practitioners to perform chest X-rays that would otherwise need to be done in hospitals. This allows more doctors to detect early signs of disease,



Valuable tool: Digitalisation in healthcare is well underway, with AI enabling doctors to spend more time caring for patients. – 123rf.com

making screening considerably more affordable and accessible.

Planning ahead

Within five years, healthcare management will pivot around real-time AI ecosystems, where predictive analytics will optimise staffing and supplies, autonomous documentation will reduce administrative load, and leaders will blend clinical insight with algorithm stewardship to drive equitable outcomes.

It is essential, therefore, that today's curricula prepare healthcare professionals of the future to embrace AI alongside human judgement in order to be effective,

patient-centred leaders in healthcare management.

Similarly, educators themselves must be well-versed in using technologies like sensor fusion, computer vision and machine learning, and be prepared to delve into the intricate issues of privacy and ethics alongside real-world applications of AI.

All of this is crucial to preparing students for future-ready, tech-enabled roles in healthcare management and leadership.

Facing challenges

As we move ahead, we should also be mindful of the barriers and challenges to AI adoption.

These can range from gaps in digital skills to reluctance stemming from mistrust of technology and concerns over accuracy, transparency and data security.

For administrators, high implementation costs, regulatory ambiguity and ethical dilemmas can also be daunting.

Responsible use of AI in healthcare will require clear ethical guidelines, transparent algorithms, explainable AI (XAI), and strong data governance through regular audits.

These are essential to balancing innovation with accountability, patient rights and societal trust, and will require targeted training, robust governance, and stakeholder engagement across Malaysia and beyond.

As technology evolves, we must promote continuous learning at all levels to stay informed and relevant. In addition to workshops, bootcamps, micro-credentials and webinars, industry collaborations – especially with tech giants – are increasingly important, as they ensure exposure to the latest tools and capabilities.

These efforts foster lifelong learning and adaptability in the fast-evolving healthcare management landscape, empowering students to pursue a wide range of careers.

Prof Saravanan Muthaiyah, School of Business and Technology dean at IMU University, is a seasoned academic with 35 intellectual properties to his credit. An active researcher in semantic technology, digital transformation, blockchain, data science and fintech, he is passionate about advancing knowledge and innovation at the intersection of technology and business. The views expressed here are the writer's own.