

PHYSICIAN LEADERSHIP - For Doctors, For Patients

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It is a profound honour to make this address for the first time as President of SMA. As of 31 December 2024, there were 17,582 registered doctors in Singapore, with 70% in the public sector and 30% in the private sector. Based on 2025 membership statistics, SMA has 13,638 Members across both sectors, representing about 78% of the medical profession.

As I step into this role, I am humbled by the trust of our Members and am acutely aware that we stand at a unique precipice in the history of our profession. While every generation of doctors may believe – rightly so – that they are living through transformative times, the shift we are witnessing today is not merely incremental; it is fundamental.

From dial-up to digital

We have been here before, though perhaps not at this velocity. Many of us will remember the early 1990s, when

the “information superhighway” was a novelty spoken of in futuristic terms. Some may also recall the first time we saw a digital X-ray – the transition from physical films to near-instantaneous, high-resolution images.

Then came the adoption of electronic medical records and the National Electronic Health Record. These are not just faster ways to write notes or store data; they have fundamentally altered expectations and patient care by enabling critical aspects of a patient’s medical history to follow him/her from the family physician’s clinic in the community to the emergency room or specialist ward in an acute hospital. Technology has helped us move from silos to a more interconnected healthcare ecosystem for the benefit of patients. We may lament over keyboard fatigue or the temptation to focus on the computer screen rather than the patient before us during consultations. Nevertheless, we also

recognise that these digital foundations, when harnessed well, offer tremendous opportunities for us to do better for the patients we serve.

The rise of agentic AI: more than just a better tool

Today, we are moving beyond the era of adopting digital tools into the age of artificial intelligence (AI). And let us be clear: AI today is not merely a tool; it is a revolution.

In the last century, AI was largely reactive, following the rules defined by humans. Since IBM’s Deep Blue’s defeat of then reigning world chess champion Garry Kasparov in 1997, the field has progressed far beyond “brute force” computation to learning-based neural networks. In this century, we are witnessing the birth of agentic AI. Unlike traditional software that requires a human to click every button, agentic systems are capable of autonomous

reasoning, planning and task execution to achieve goals. Without overstating it, this resembles a Cambrian explosion in machine capability.

The speed of this revolution is staggering. In the business world, AI proficiency is changing from a competitive advantage to a competitive necessity. McKinsey CEO Bob Sternfels says the firm now has about 25,000 AI agents integrated into its workforce, working alongside 35,000 human employees, transforming consulting by automating complex, multi-step tasks such as data analysis and document preparation. These AI agents perform work previously done by junior consultants, enabling faster and more efficient project delivery.

For healthcare institutions, lagging in validated AI adoption in the future could potentially translate into measurable gaps in diagnostic accuracy and patient outcomes. Some even fear that AI agents may eventually replace physicians. In 2024, Tsinghua University made headlines with the launch of the world's first AI hospital, Agent Hospital – a model that blends virtual AI agents, clinical care and real-world pilot deployment into one tightly integrated system.

How should human doctors – trained over years, if not decades, under warm-blooded mentors – respond to this revolution? We recall how generations of doctors before us navigated earlier technological revolutions, including the invention and subsequent mass adoption of digital connectivity tools such as e-mails, the World Wide Web and “Dr Google”. Similarly, we are unlikely to resist, change or deflect the current wave of technological change.

Be that as it may, while AI can possibly process 10^{12} data points in seconds to suggest a diagnosis, it cannot hold a grieving mother's hand or convey genuine human empathy. It can calculate the probability of a surgical complication with precision, but it cannot finesse complicated family dynamics and the ethical nuances of end-of-life care.

As physician leaders, we must be able to adapt and adopt. We must lead and guide the integration of AI in healthcare, such as harnessing it to eliminate administrative burdens that contribute to physician burnout, enhance diagnostic accuracy to unprecedented levels and personalise treatment protocols over disease life-cycles through precision medicine. Our efforts in AI must enable us to return closer to the patient's bedside, focusing on the human and humanity at the heart of patient care.

A call to leadership

The world of 2026 and beyond may demand a new kind of doctor – one who is technologically fluent yet humanistically grounded. I urge every member of the medical profession to take up the mantle of physician leadership in this new reality – we cannot remain passive observers; we must be its architects.

There is a sentiment circulating on the Internet: “I do not want AI to perform art and writing for me so that I can spend more time washing and folding laundry; I want AI to liberate me from the drudgery and mundane tasks so that I can have more time for creative pursuits such as art and writing!” So too is the corollary

in healthcare. Surely our goal is not to automate the doctor out of the room, but to harness AI to bring the doctor back to the patient – like leveraging AI to seamlessly handle administrative or coordination tasks, so we can look our patients in the eye more often. AI may offer unrivalled intelligence, but as doctors, we bring intentionality, empathy and morality.

SMA's slogan, “For Doctors, For Patients”, reflects our recognition that the doctor-patient relationship lies at the heart of any scientific revelation, technological innovation, policy decision and business practice that affects healthcare, as well as our commitment to protect this relationship. As we strategically harness AI technologies to advance the best interests of our patients, let us solidify trust in our profession and ensure that the human touch remains central to our practice, supported by the most powerful analytical tools ever created. ♦

Dr Lee is a public health specialist and Cluster CEO of St Andrew's Nursing Home, with seven homes across Singapore and four more in the pipeline. He started his medical career in internal medicine at Changi General Hospital and still sees patients regularly at St Andrew's Migrant Worker Medical Centre.

