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CONTENTS

Editorial

04 The Editors' Musings

Dr Tina Tan and Dr Clive Tan

Feature

05 Shaping the Future of Healthcare Regulation – Interview with Adj Prof Raymond Chua

Dr Tina Tan and Dr Clive Tan

President's Forum

09 Untying the IP Policy Knot: A Doctor's Perspective

Dr Ng Chee Kwan

Council News

10 Highlights from the Honorary Secretary

Clinical Asst Prof Benny Loo Kai Guo

Event

11 Record Keeping, AI and NEHR: Annual National Medico-Legal Seminar 2025

Benjamin Ong

Insight

14 Space Oil and the Zombie Generation

Dr Puah Ser Hon and Kng Kwee Keng

16 Kpods: Etomidate in a Pod

Dr Melvyn Zhang and Dr Lambert Low

Opinion

18 Vaping and the Recent Changes to Reporting Requirements

Dr Chie Zhi Ying



SMA Charity Fund

20 Why Supporting Medical Students from Low-Income Families Matters to Society

Sharmilah Banu

Indulge

21 Framing Our Memories

AIC Says

24 Guiding the Conversation: How GPs can Champion Advance Care Planning

Agency for Integrated Care



The Editors' Musings

DR TINA TAN

Editor

Dr Tan is a psychiatrist in private practice and an alumnus of Duke-NUS Medical School. She treats mental health conditions in all age groups but has a special interest in caring for the elderly. With a love for the written word, she makes time for reading, writing and self-publishing on top of caring for her patients and loved ones.



It comes as no surprise that our Government has taken a hard stance against Kpods and vaping. Consequently, we as medical practitioners have had to rapidly inform ourselves on what exactly Kpods are, and the new and existing regulations we are expected to comply with in our clinical practice. The response and agility demanded of us in recent months is reminiscent of 2020, when the COVID-19 pandemic first hit Singapore and every doctor from every specialty found their daily work impacted in various ways. Likewise, with respect to recent events, you would be hard-pressed to find a doctor who can say, "This doesn't concern me." To me, it highlights the importance of staying in touch, staying connected, and above all, staying attuned.

Having interviewed Adj Prof Raymond Chua over a pleasant lunch with *SMA News*

colleague Dr Clive Tan, I have concluded that this is what Adj Prof Chua tries to achieve in his own line of work. One of the original titles proposed for the interview was "Regulators Are Not Your Enemy". This unused title and the theme of agility conveyed in the interview highlight the fact that regulators are generally aware of issues on the ground and are trying their best to help doctors.

On a personal level, this does not mean that I agree with everything regulators do (ahem, such as the Health Information Bill). However, since I am but one tiny fish in a large pond, the conditions of which are beyond my control, all that I can do is express my appreciation for those on the regulatory side and the fact that they are willing to listen and stay attuned.

DR CLIVE TAN

Guest Editor

Dr Tan is a father of three, and he is very glad that vaping is illegal in Singapore. When he travels to countries where vaping is legal, his heart aches when he sees youths vaping. He is also a public health physician based in the public sector health system.



The youth vaping crisis in Singapore has been clearly acknowledged in 2025. The authorities and healthcare professionals have been piling in resources, stepping up enforcement and turning up the volume for public communications. To help catch the attention of the general population, many of these messages have been designed to take the form of short-form content and videos.

The trend of more youths using drug-laced vapes is especially worrying, as the harm to the user compounds over time and impacts his/her development. Several of the doctors featured in this issue have been at the forefront of this war against vaping, and

we are appreciative of them taking the time to write for our readers. We hope you find these perspectives useful and insightful. ♦



Shaping the Future of Healthcare Regulation

Interview with Adj Prof Raymond Chua

Interview by Dr Tina Tan and Dr Clive Tan



Adj Prof Raymond Chua assumed the role of CEO of the Health Sciences Authority (HSA) in December 2024. He has held leadership positions in both the public and private sectors over the course of his career, including Deputy Director-General of Health (Health Regulation) at the Ministry of Health (MOH), Managing Director at Eisai Clinical Research Singapore and International Medical Director at Shire Pharmaceuticals. **Dr Tina Tan (TT)** and **Dr Clive Tan (CT)** speak with **Adj Prof Raymond Chua (RC)** as he closes in on his one-year mark as CEO to learn about his journey becoming an “accidental” regulator and his vision for healthcare regulatory work, including how to inspire more doctors and other healthcare professionals to join regulations and enable the future of healthcare together.

TT: Thank you for meeting with us today, Adj Prof Chua. To start off, how did you come to be in health regulation?

RC: I did not begin my career thinking that I would become a public health specialist and administrator or even a regulator. I initially intended to specialise in O&G, and even undertook the O&G Part One examination. However, as part of my Medical Officer Posting Exercise (MOPEX), I was posted to MOH's Hospital Services Division (HSD) in year 2000. Going from a specialty-based programme to broad-based training was very insightful and I gained much exposure to various challenging issues on the ground which I was unaware of. Subsequently, then HSD Director Adj A/Prof Arthur Chern and then Director of Medical Services Prof Tan Chorh Chuan asked if I was keen to join public health as my specialty. I really enjoyed learning more and seeing how I could contribute to enhancing health systems and policymaking, so I agreed. I was also glad to have the opportunity to pursue my Master of Public Health at the London School of Hygiene and Tropical Medicine in 2002. After my return, I rotated through various MOH divisions – which gave me broader exposure in healthcare finance, epidemiology and diseases control, and clinical quality and patient safety – including the newly set up MOH Holdings (MOHH).

TT: That is quite a lot of exposure in MOH. Did these change your life course?

RC: Sort of. I discovered through these postings that I knew very little about other subjects such as marketing, human resources and economics, which were not covered in medical training. When I was rotated to healthcare finance, I realised I was ill-fitted to do the work because of my lack of economic knowledge, so I pursued a Master of Business Administration at the University of Nottingham myself.

An interesting opportunity came by in 2007. The Economic Development Board was positioning Singapore as the regional biopharmaceutical medical hub and sought to attract pharmaceutical companies to set up regional headquarters here. I decided to put what I learnt into practice and took an offer to be the managing director at Eisai, a Japanese pharmaceutical company. After that, I joined Shire, a UK pharmaceutical company, and replicated my work in Eisai to bring Shire's global trials into Asia too.

TT: What prompted your return to the public sector?

RC: Two years into my stint with Shire, then CEO of HSA Prof John Lim called me and said, “I think it's time for you to come back to the bright side.” I joked at first that I did not need to come back because I had always been on the “bright side”! More seriously, I was a public health physician who became a pharmaceutical physician; in fact, I was a “**regulatee**”, not a

regulator. But John told me, “Very good. That is precisely what we want. We want someone who doesn't know much about regulation, someone who comes in with a blank slate and brings a fresh perspective to regulations.” The challenge was, having worked under regulators, how I would adjust myself to be a regulator. Could I use regulations to enable rather than restrain businesses? I took up the challenge and returned to HSA in 2012 as Group Director of Health Products Regulation. That is a brief recap of how I became an “accidental” regulator.

Reshaping regulations to enable

TT: What would you say was your biggest challenge after returning to the “bright side”?

RC: The most significant incident occurred when I had just returned. It was an Easter Sunday morning when I reached for the newspaper to read, and to my horror, the front-page headline was “Docs upset over HSA safety rule”. HSA was facing a crisis over the rolling out of a regulatory framework for medical devices – a novel change since medical devices had never been regulated before. With this, a wide variety of items would be regulated as medical devices, from very low-risk items like thermometers to very high-risk items like implants. The industry was informed of a sunrise period of three years before the actual framework would be enforced.

However, the industry looks at regulations with a different lens – any regulation imposes the burden of regulatory compliance, which may impact the company's bottom line. Some companies felt that Singapore was too small a market to be worth the cost and hence decided to pull out. Naturally, there was a great deal of discontent with the situation.

TT: The front page! That must have been dramatic. What did you learn from that incident?

RC: The most valuable lesson I learnt is that regulation is not just a science but an art – an art of communication. Regulations come in the form of laws, and generally, stakeholders focus on the practical compliance of the law, but legal jargon gets in the way. What stakeholders want is, "Tell me in simple and clear layman terms what you want me to do and how to comply." It is key to work closely with stakeholders to better support their compliance. Rushing to implement a piece of law when no one is ready to comply is doomed to failure. The traditional regulatory mindset was more rigid and less accommodating – "I have this set of regulations, and you must comply or be in breach of the law." If it was not covered in the law, then you could not ask for exceptions; it was "my way or the highway". The regulatory framework was thus focused on strict enforcement and less so on enabling stakeholders to innovate, providing little flexibility to regulatees. Having come from the industry, I understood that this rigid approach would only create friction between the Government and stakeholders. Hence, what we needed was agility, engagement and collaboration.

That is where regulatory sandboxes are useful. We have a saying that when approached with a request for something innovative or unique, if we as the regulator are uncertain, our first instinct would be to say no. However, I would reframe it to ask, is the new product or service good for our people? Would it help enhance the national system? If so, is there another way of doing things? And if we do not know the answer to these questions, instead of saying no, we should focus on working together with the industry to understand what the science is and how we can facilitate the industry to benefit the health of our population.

CT: Going back to your journey, what came after your stint as Group Director of Health Products Regulation?

RC: After successfully transforming the products regulations in HSA, I moved to MOH Health Regulation Group in 2017. The next item on the agenda then was to revamp the Private Hospitals and Medical Clinics Act (PHMC), which was an archaic premises-based regulation that only covered establishments with four walls and a door, such as hospitals, medical clinics, nursing homes and laboratories. But as a result, the PHMC could not accommodate new concepts such as virtual telemedicine or Mobile Inpatient Care @ Home. Going back to my previous point, if we had retained a rigid mentality, failing to account for such new care models in the regulatory framework would mean you cannot conduct telemedicine or allow inpatients to be managed in the community. That cannot be the case, so we had to see how we could evolve this regulation.

We thus decided to move from a premises-based regulation to a services-based one, accommodating different modes of service delivery by turning the focus of the legislation to the services provided.

Ongoing regulatory efforts

TT: What are you working on now that you are CEO of HSA?

RC: Our key area of focus is to streamline and align our regulations across all domains in MOH, HSA and the professional fronts. One of the frustrations faced as a service provider is acquiring approval from multiple parties when rolling out something new. Hence, our aim is to align and provide regulatory clarity, reduce inefficiencies and make life easier for stakeholders.

TT: That sounds like a great deal of behind-the-scenes work. It seems your journey involved a lot of flexibility.

RC: I would say, agility.

TT: Was this something you figured out on your own or something you learnt from the people who guided you along the way?

RC: There were certainly many seniors who guided me on my journey, while I also developed this sense of agility from my own experiences, such as the 2012 medical device crisis and my experience in what some may call the "dark side". Agility is crucial to avoid the stereotype of being in an ivory tower, because policies should not be rolled out without understanding the implementation details. Policy is implementation. If you roll out a policy without sufficient understanding of the situation on the ground, you will simply end up with a whole set of regulations that are not implementable while losing the stakeholders' trust – and that would be disastrous.

Hence, it is important to engage with the stakeholders. Some say that this consultative way is long-winded and taxing. But if you take the time and effort to explain the policy intent, why some rules are needed and get everybody on the same page by understanding the trade-offs, then even if we agree to disagree, the final roll-out will be much smoother and you will gain everyone's trust and confidence.

CT: Could you tell us about the regulatory plans for digital health services?

RC: The whole healthcare system is undergoing a big shift toward digitalisation, not just locally but globally. Singapore must also keep pace and explore digitalisation to benefit patient care. We are hence rolling out the Health Information Bill (HIB) which will mandate all licensed healthcare service



Hosting Dr Margaret Chan, then Director-General of World Health Organization, with SMA colleagues when I was the liaison officer for her first official Singapore visit in 2006

providers to contribute key medical data into the National Electronic Health Record (NEHR). Our key objective is to facilitate continuity of care for patients, particularly those with chronic conditions and the elderly. Patients who cannot recall past medical problems can have their histories checked on NEHR so doctors may provide safer and better quality care. This also serves as a good reference for patients who are unable to recall the names of the drugs they are allergic to, medications and dosages they were on, etc. Duplicate tests such as blood tests or X-rays can also be avoided.

While contribution is mandatory, I would like to highlight that accessing NEHR is not mandatory. There is a misconception that once your IT systems are connected to NEHR, you are obligated to constantly refer to it. Our stance is that NEHR is a complementary and supplementary tool to clinical care. Physicians should always stick to the gold standard of proper history-taking and physical examination. And **only** if you think that your patient does not seem to be able to provide a coherent history or is unable to recall certain details, then NEHR can be used to obtain the appropriate information to support the clinical management.

We will also be putting in a sunrise period for our service providers to meet HIB requirements, as we know that it is not possible for everyone to meet the requirements as soon as the Bill is read in the first quarter of 2026. So do not worry, we will definitely support and train service providers and professionals and help the vast majority get ready before enforcement.

Truth is, while we can come up with the best policy and legislation which may benefit patients, each stakeholder will have very different concerns which we need to engage and listen to, to maximise stakeholders' regulatory compliance.

TT: It seems that your experience with the 2012 crisis impacted you greatly.

RC: It was a very impactful lesson. Given the evolving state of medical practice and technologies, we must be very – again, back to the word – agile. We must be sufficiently open-minded to review our regulations if needed. And when unclear, be prepared to engage, clarify and get everyone on the same page.

TT: Coming to a more current topic, how does this differ from the recent

reclassification of etomidate and the crackdown on vapes? How is the regulation for that, which came very fast, different from HIB?

RC: That is a very different kind of regulation. What I highlighted earlier is about regulation which seeks to enable innovative care models and technologies, while this regulation deals with a prohibited product. We enhanced our regulations due to a perceived “lack of deterrent enforcement measures” on vaping, particularly so when addictive substances like etomidate are laced within the vapes. In addition, we take escalating enforcement measures.

Preparing for the future

TT: One component of agility is being able to predict forthcoming issues. How do you approach predicting the future? What issues are on your radar?

RC: Horizon scanning is very important. In my industry days, we had to project ahead the pipelines of pharmaceutical products that we need to launch in the market to target the disease priority areas in the world, to maximise benefits for patients. Similarly, a regulator cannot be unaware of what is coming. One often hears that regulators lag behind, which is what I am most afraid of – that stakeholders want to roll out new products or technologies but are put on hold because the regulatory capability has not been built up. Hence, it is vital for us to keep track of potential issues through scanning the Internet and engaging the industry closely to understand the new pipelines under development. This lets us prepare our capabilities accordingly and be ready to enable when the time comes.

Some issues on our radar include precision medicine, artificial intelligence and genomics, which will disrupt how healthcare is delivered to our patients. I also see new services such as longevity and wellness services popping up. Lifestyle modifications such as exercise, eating and sleep are not problematic. But it becomes a grey area once longevity services make certain claims which may not be evidence-based.

As regulators, our responsibility is always to safeguard patient health and public interest, but our resources are finite and we cannot be regulating everything. If it is a matter of efficacy, regulations may not always be required for lower-risk products or services

because that can be a matter of the patients' responsibility – caveat emptor. But for higher-risk products like cell and gene therapies where safety is of paramount importance, we will have to step in and regulate.

Again, though this sounds very simple in theory, we will have to see how to operationalise this and we need to engage the various impacted stakeholders, including service providers, doctors, dentists and insurers.

CT: In terms of regulation, it seems you take a very closely engaged approach vis-a-vis other countries who are more reluctant to work so closely with stakeholders. Could you share your perspective and leadership take on this?

RC: My perspective is that we as regulators may not fully grasp the science, technologies or operational practices behind the new service or product. Hence, we can either develop a piece of legislation that no one can meet or one that is “fit for purpose”, suitable for the majority to comply with and still be able to deliver their services or products safely to patients. Engaging with and hearing from our stakeholders is an effective and efficient way of achieving this. In this process, we build trust and confidence that we as regulators are there to facilitate rather than hinder. That being said, I also acknowledge that there should be some independence between regulator and regulatee. The bottom line is that while we work with the stakeholders, we do not take their demands on how the regulations should be enacted. We do not abide by regulatory capture but always take the safety of the patients into consideration.

CT: So, it is a partnership approach.

RC: *[laughs]* Sort of. Since I am a marriage solemniser, I compare this partnership analogously to a marriage: two partners coming together who must trust each other and work through problems together for the greater good.

CT: Apart from engaging the industry, it seems important to have healthcare professionals working in HSA and the regulatory space. What do you think about having more doctors, nurses and pharmacists join this space?

RC: We definitely hope to get more healthcare professionals to join this space. We have some pharmacists in HSA, but we definitely need a variety of other healthcare professionals such

as doctors, dentists, nurses and allied health professionals joining us if we want to enable the future of healthcare together. It is crucial for healthcare professionals to understand and be immersed in this regulatory landscape. But there is a dominant perception that regulation is very dry and legalistic, like being policemen. As a result, few people are keen on working in the regulatory field.

TT: You are right, I do have these impressions of regulatory work. Even after hearing from you, I still have these ideas in my mind. *[laughs]*

RC: What is most important about working in regulation is that you can be part of a movement to change the healthcare landscape. Healthcare professionals bring to bear the knowledge and expertise of their field to collaborate with their peers and the industry, and to craft the right regulation to enable innovations within the field safely. The US Food and Drug Administration and Australia's Therapeutic Goods Administration have whole panels of doctors working with the regulators to evaluate new drugs and devices. The regulators depend on a lot of doctors, and they have a large patient support group to work with as well.

TT: Our doctor presence in Singapore's regulatory bodies is likely quite small, right?

RC: Ours is very rudimentary, but this is an aspect that I hope to build up over time. I am trying to see whether we can build a MOPEX track to bolster this. However, what is really needed is to break the mould and change the notion that regulatory work is very dry. Truth be told, I had the same impression when I first joined as well, so I have been working on changing that impression. Though I think many people still like the adrenaline of working in other specialties. I am trying to see how we can become a global regulatory thought leader in health products, services, information and professionals, and to build up a robust, competent and well-connected pool of regulatory talents. So do join me in this regulatory journey if you are keen to be part of a movement to shape the new healthcare landscape!

Outside of work

TT: Moving on to more personal questions, I am curious about how you became a solemniser.

RC: That was about 20 years ago in 2005. Back then, a lot of solemnisations were conducted at the Registry of Marriages (ROM). Then came a need for the ROM to expand its capacity, and just like how we went from hospital to community care, they also allowed more external solemnisation and hence had to increase the number of licensed solemnisers. I was still working with MOH at the time, and volunteers were sought to help with this. Since I did not end up in O&G, I decided to volunteer to be a solemniser and help deliver marriages instead. Anyway, this is a very joyous community work, giving back to society in an enjoyable and meaningful manner, so I gladly volunteered.

CT: Tell us a little about your pastimes outside of work that help you relax.

RC: Oh yes, that is very important – I also need some form of work-life balance. I make sure to keep at least 30 minutes to an hour of my time every one to two days to do something outside of work and have some “me time” to pause and reflect. I am quite physically active to keep myself healthy and fit, so I do dragon boating, running, trekking and also go to the gym. And now like many, I join HYROX once a year. But I also enjoy reading, gardening, cooking and travelling. I do a little of everything, but I am probably not that good in anything. *[laughs]* I believe that if you want to be a leader, you should also be physically fit. Otherwise, you will have trouble sustaining your work and keeping a clear mind. For me, I began to work on my fitness because of a health scare ten years back.

CT: Which countries do you enjoy travelling to for leisure?

RC: Like many, Japan comes up top. Probably Hong Kong too. And of course, London, UK where I did my postgraduate. Norway and Iceland were also scenic. I enjoy discovering new places too, and I hope to have some time to explore more exotic locations, like Peru, Patagonia, Cape Town, Bhutan and Mongolia, among others. If anyone has good travel itineraries to share, please let me know too.

Closing thoughts

CT: Do you have a final message for our readers to take home?

RC: I would say, do not fear regulations or regulators. I think a lot of people fear regulators, or even worse, they scold regulators! Nobody loves regulators. People often think poorly of us or find us a bother. But we are truly here to engage, help and work together with all stakeholders for patient safety and to enable innovations. This is my challenge, to change how people view regulators and to get them to join us and make a difference by enabling the healthcare of the future.

Part of this is that people often judge regulators by the harshness of our enforcement and neglect the collaborative and enabling aspects. Of course, when regulations are being flagrantly flouted, it becomes necessary for us to wield our stick. But by and large, much of regulation involves this partnership and collaboration, and I hope people will come to appreciate that.

TT: Wise words indeed. Thank you for your time today, Adj Prof Chua! ♦



The routine weekend rowing with the MOH Health Dragons at Kallang



This is just part of the interview conducted with Adj Prof Chua. To read more, please visit <https://bit.ly/5711-Feature>.

Untying the IP Policy Knot: A DOCTOR'S PERSPECTIVE

Text by Dr Ng Chee Kwan

Integrated Shield Plans (IPs) are health insurance plans that offer enhanced coverage for hospital bills at both public and private hospitals. IP premiums have been rising significantly in recent years, and a prevailing view of the situation is that due to insurance being designed with generous coverage, the various stakeholders (ie, insurers, private hospitals and doctors) have got themselves tied up in a knot, resulting in escalating private hospital bills, rising premiums and more safeguards introduced to the claims process.

To make an analogy, a surgeon will make at least three throws when tying a knot during an operation to ensure that it is secure and does not come apart on its own. The IP policy knot likewise does not come apart easily as each stakeholder previously contributed to one throw of the knot. To untie the knot totally, each stakeholder has to untie their portion of the knot.

My opinion is that the doctors' throw of the knot has effectively been untied. The average annual growth in private surgeon fees was moderated to only 0.4% for the period of 2019 to 2023.¹ This is well under the annual inflation rate for Singapore for that period. This is in no small part due to the efforts of the Ministry of Health (MOH) and the MOH Fee Benchmarks Committee in coming up with the fee benchmarks, which are a logical successor to the now-defunct SMA Guideline on Fees.

In addition, ongoing MediShield Life Claims Rules implemented by the MOH Claims Management Office to determine the appropriateness of claims involving MediShield Life (of which IP policies ride upon) would effectively address issues of over-servicing and inappropriate multi-coding by a small minority of doctors.

The determination of the most recent fee benchmarks was a massive exercise involving about 600 specialists, administrators from private hospitals and insurers, to come up with fee benchmarks for 2,100 surgical procedures and 500 sets of anaesthetic fees. The Claims Rules involved the collaborative input of specialists from both the public and private sector. I was privileged to be involved in the Urology Claims Rules Workgroup and am proud of our efforts towards contributing to the greater good.

I am not saying that doctors are perfect. There may still be a small minority of doctors who persist in submitting inappropriate charges, but routine claims scrutiny by insurers before and after admission should pick these cases up.

With the doctors' portion of the IP knot largely untied, it is left to the insurers and private hospitals to untie their portion of the knot and ensure that their charges are reasonable. I sincerely hope they will be able to do so, without compromising on the timeliness and quality of patient care. ♦

Reference

1. J Tan. Private insurers and hospitals all tied up in a knot; MOH helping to untie it: Ong Ye Kung. *The Straits Times* [Internet]. 2 July 2025. Available at: <https://bit.ly/4h5jVcW>.

Dr Ng is a urologist in private practice and current President of the SMA. He has two teenage sons whom he hopes will grow much taller than him. He has probably collected too many watches for his own good.



HIGHLIGHTS

From the Honorary Secretary

Report by Clinical Asst
Prof Benny Loo Kai Guo

Dr Loo is a paediatrician in public service with special interest in sport and exercise medicine. He serves to see the smiles on every child and athlete, and he looks forward to the company of his wife and children at the end of every day.



Survey on informed consent published in *SMJ*

SMA conducted an online survey in August 2024 to gather opinions from doctors on the general principles of consent-taking. The findings have since been published in the September 2025 issue of the *Singapore Medical Journal (SMJ)*.

The survey shows that almost all respondents (96.7%) indicated that they obtained informed consent in their practice. A smaller proportion of GPs (87.6%) indicated that they do so in their practice. Almost all respondents opined that it was important to inform patients of severe but rare risks (97.2%) and material risks (99.3%) during consent-taking. In addition, 80.4% of respondents reported confidence in their ability to determine the material risks necessary to inform patients. A smaller proportion of doctors in training (69.0%) were confident that they could determine the material risks. Results also showed that 80.6% of the respondents included in their consent-taking any additional tests and procedures likely to be performed during the procedure.

The full text of the *SMJ* article can be found at <https://bit.ly/47IF17a>.

Call for regulation of IPs

In a letter to the *Straits Times* Forum, SMA commented on recent questions raised in Parliament relating to the need for regulations of Integrated Shield Plans (IPs).

SMA advocated that well-considered regulatory measures could ensure that insured patients are treated in a fairer way.

The areas that SMA recommended for regulatory considerations include:

- Limiting the turnover of panel specialists.
- Mandatory disclosure of insurer-hospital arrangements, and penalties to policyholders and panel doctors for not using preferred facilities.
- Communication of changes affecting coverage or claims, including adequate notice period.

We encourage Members to read the full Forum letter published on 30 September 2025 at <http://bit.ly/43x4btH>. ♦

Record Keeping, AI and NEHR: Annual National Medico-Legal Seminar 2025

Text by Benjamin Ong, Editorial Executive

Over the weekend of 13 and 14 September 2025, over 300 doctors, lawyers and allied health professionals attended the Annual National Medico-Legal Seminar (ANMLS) 2025 for a series of riveting talks and discussions. ANMLS is jointly organised by the SMA Centre for Medical Ethics and Professionalism (SMA CMEP) and the Medico-Legal Society of Singapore (MLSS) and was held this year at One Farrer Hotel. The two-day seminar was titled “Medical Record Keeping in an Evolving Technological and Regulatory Landscape”, and covered a swathe of timely topics including the National Electronic Health Record (NEHR), documentation of medical records and the use of artificial intelligence (AI).

A/Prof Lai Siang Hui, MLSS President, kickstarted the seminar with a brief opening address, and Clinical A/Prof Gerald Chua presented the first discussion on the gold standards of clinical records. Other topics presented included what good clinical records comprise from the perspective of the courts, the various challenges involved in record keeping, and the management of cybersecurity risks.

Participants returned early the next day, eager to continue their learning. Day 2 of ANMLS focused on the use of AI technology with regard to medical records, from AI’s potential benefits and pitfalls to practical tips and the ethical frameworks involved. Speakers shared their insights and personal experiences with the growing adoption of AI technology. Among other nuggets of wisdom, it was emphasised that the buck stops with the clinician, and that a clinician should not let technology overtake his/her judgement.

The panel discussions on both days were well received, spurring earnest discussion between panellists and the audience, facilitated by microphones and the Slido platform for questions from the ground. Among the many questions, audience members also brought up a variety of hypothetical scenarios to clarify and elaborate upon NEHR usage, drawing detailed answers from Adj Prof Raymond

Chua, CEO, Health Sciences Authority, and Dr Goh Min Liong, Chief Medical Informatics Officer, Ministry of Health.

In closing, Dr Charmaine Heah, MLSS council member and SMA CMEP faculty member, thanked participants for their attendance and enthusiastic contribution to the seminar.

We would also like to express our thanks to all speakers and participants, our Gold Sponsors, CyberSafe and Medical Protection Society, as well as our other sponsors, Allium Healthcare, Standard Chartered and Summit Planners, for the success of the Annual National Medico-Legal Seminar 2025! ♦

Legend

1. Attendees in rapt attention at ANMLS 2025
2. Adj Prof Raymond Chua (centre) posing with fellow panelists for a group photo
3. Audience members engaged with enthusiasm





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Pneumonia is the second most common cause of death in Singapore,¹ where tropical heat and humidity predispose the population to year-round transmission of respiratory viral infections (RVIs).² Following the COVID-19 pandemic, there has been significant rebound in the transmission of endemic RVIs such as influenza and respiratory syncytial virus (RSV) in Singapore, with 28-day mortality rates of ~5% overall among adults hospitalised for vaccine-preventable respiratory infections (Table 1).³

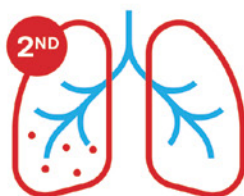


Table 1. Outcomes of hospitalisations for RSV, COVID-19, and influenza in Singaporean adults³

Clinical outcome, n (%)	Total hospitalisations	28-day mortality	ICU admission
COVID-19 hospitalisations (2023), n (%)			
Unboosted	848 (6.6)	82 (9.7)	34 (4.0)
Boosted ≥ 1 year prior with ancestral mRNA vaccines	5,645 (44.1)	281 (5.0)	163 (2.9)
Boosted <1 year prior with updated mRNA vaccines	987 (7.7)	44 (4.5)	23 (2.3)
Influenza hospitalisations (2021–2023), n (%)			
	3,999 (31.2)	36 (0.9)	69 (1.7)
RSV hospitalisations (2021–2023), n (%)			
	1,332 (10.4)	72 (5.4)	51 (3.8)

ICU, intensive care unit; RSV, respiratory syncytial virus.



Vaccines protect against severe disease

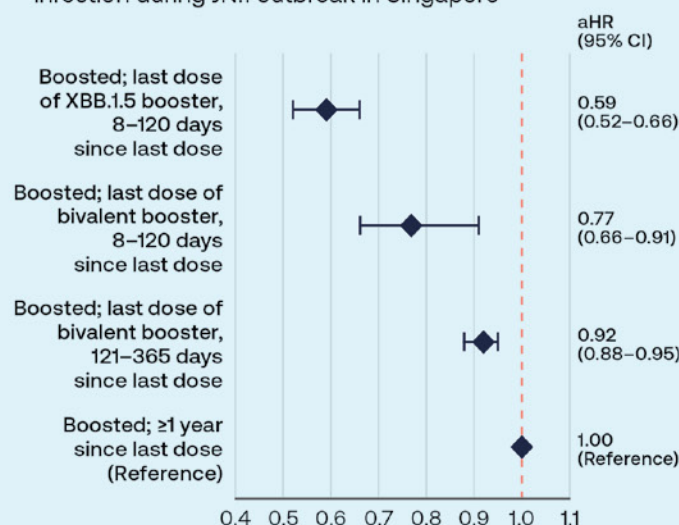
In Singapore real-world observational studies, vaccination against RVIs, including influenza and COVID-19, confers effective protection against hospitalisations and mortality.^{4–6} In a retrospective study of ~20,000 Singaporean adults, relative influenza vaccine effectiveness declined to only 69% of baseline at weeks 42–49 post-vaccination, underlining the need for annual influenza re-vaccination, especially among at-risk groups – including older adults and individuals with chronic lung disease – in whom vaccine-effectiveness waned fastest.⁶

Updated COVID-19 vaccine maximises protection



For COVID-19, updated vaccination with newer strains confers the best protection against SARS-CoV-2 infection, as well as against severe disease. During a JN.1 variant wave in Singapore, receipt of an updated XBB.1.5 booster 8–120 days earlier was associated with 41% lower risk of JN.1 infection, while receipt of a bivalent booster 121–365 days earlier was associated with 8% lower risk of JN.1 infection, compared with individuals last boosted ≥ 1 year earlier with ancestral monovalent vaccines (Figure 1). In addition, recent receipt of an updated booster protected against post-acute sequelae including emergency department visits and hospitalisations.⁴

Figure 1. Vaccine effectiveness of ancestral versus bivalent COVID-19 vaccines against SARS-CoV-2 infection during JN.1 outbreak in Singapore⁴



aHR, adjusted hazard ratio; CI, confidence interval.

Data computed using Cox regression. Data points are presented as adjusted hazard ratios with bars representing 95% confidence intervals. Dotted line represents the reference group.

Updated COVID-19 vaccine doses have also been shown to be protective against long-term sequelae (“long COVID”) in the Singaporean population, with almost a 40% decrease in risk among adults who received prior bivalent boosters, versus those boosted prior with ancestral COVID-19 vaccines.⁷ These studies highlight the importance of updated COVID-19 vaccines in conferring more effective protection, particularly among at-risk groups.

Why Flu and COVID-19 Vaccines Still Matter in 2025

COVID-19 vaccination still matters

As with other endemic respiratory diseases, periodic COVID-19 waves continue to be expected in Singapore year-round, with new SARS-CoV-2 variants emerging.² COVID-19 remains a significant contributor to morbidity and mortality arising from acute respiratory infections during endemicity.



In a modelling study that estimated excess influenza-, RSV-, and SARS-CoV-2-associated hospitalisations in Singapore from 2015–2023, 19.3% of hospitalisations for acute respiratory infections were attributed to COVID-19.²

In another study in Singaporean adults, Omicron COVID-19 was more severe compared to influenza (28-day mortality, 4.5%–9.7% in COVID-19 hospitalisations versus 0.9% in influenza hospitalisations).³ In particular, older adults and individuals with pre-existing comorbidities including asthma, chronic obstructive pulmonary disease, ischemic heart disease, or heart failure, remain at increased risk of severe COVID-19 disease.^{8,9}

Overcoming vaccine hesitancy

Despite vaccination against respiratory infections being included into Singapore's National Adult Immunisation Schedule, the National Vaccination Programme (for COVID-19), and being fully subsidised as part of the nationwide Healthier SG programme,¹⁰ vaccine uptake in Singapore can be further improved. Uptake of updated COVID-19 boosters has significantly dropped post-pandemic, with fewer than 5% of adults having received an updated COVID-19 booster.⁴

Vaccine hesitancy remains, even among older Singaporeans,¹¹ irrespective of the substantial and growing evidence demonstrating the real-world safety and effectiveness of COVID-19 vaccines.¹² Local studies identified that having a regular family physician, and receiving point-of-care informational interventions, can increase uptake of vaccinations against respiratory infections.^{13,14}

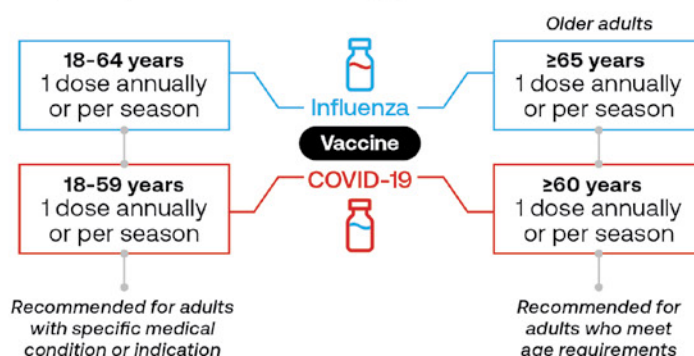
Physicians must continue acting as effective advocates for vaccination, particularly among groups at higher risk of severe outcomes.



Current recommendations

At present, current national vaccination recommendations for COVID-19 (2025/2026) highlight the importance of up-to-date protection for older adults (≥60 years), medically vulnerable individuals aged ≥6 months, and older adults staying in higher-risk settings (e.g., aged care facilities). Persons living or working with medically vulnerable individuals are also encouraged to consider receiving a COVID-19 vaccine.¹⁵

Figure 2. Vaccination recommendations for prevention of respiratory infections in adult Singaporeans^{15,16}



Similarly, under the National Adult Immunisation Schedule, influenza vaccination is recommended for older adults aged 65 years and above, or individuals with comorbidities.¹⁶ Given the overlaps between eligible age categories for COVID-19 vaccination (Figure 2), co-administration of COVID-19 and influenza vaccines may improve uptake and convenience by reducing the number of patient visits, without compromising patient safety and health.¹⁷ Notably, co-administration of these vaccines has not shown an association with substantially inferior immune response or more frequent adverse events versus COVID-19 vaccine administration alone.¹⁸

Conclusion

Vaccine-preventable respiratory infections remain a year-round public health challenge in Singapore, where a humid tropical climate predisposes to year-round viral transmission. A large proportion of patients hospitalised with pneumonia in a tropical setting have evidence of a RVI on systematic testing.² The list of vaccine-preventable respiratory infections has expanded beyond influenza and pneumococcal vaccination in

recent years to include COVID-19. However, vaccine hesitancy is a major obstacle to vaccine uptake and infection prevention. Co-administration of COVID-19 and influenza vaccines may help improve vaccine uptake without compromising patient safety. **Physician recommendations are important in educating patients of potential benefits of vaccination against respiratory infections.**



For Singapore Healthcare Professionals only

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Space Oil and the Zombie Generation



Text by Dr Puah Ser Hon and Kng Kwee Keng

The vaping device, also known as an electronic cigarette (e-cigarette), electronic vaporiser (e-vaporiser) or electronic nicotine delivery system, was initially developed by a Chinese pharmacist, Hon Lik, in 2003 as a drug delivery device for conventional tobacco cigarette smokers.¹ The original intent was to create an alternative nicotine delivery device to aid with smoking cessation. Instead of combusting tobacco, e-cigarettes use batteries to heat liquid containing nicotine, which is atomised into an inhalable aerosol. Solvents such as propylene glycol and vegetable glycerin are required to keep nicotine in suspension.² The chemical contents within the liquid in e-cigarettes have been known to cause irritation to the lungs when inhaled, are potentially carcinogenic and can cause adverse effects to the cardiovascular system.³ It can also exacerbate underlying lung diseases such as asthma, causing a deterioration in control.⁴ E-cigarette or vaping-associated lung injury (EVALI) causes significant pulmonary infiltrates, leading to severe hypoxaemia and even death.⁵ The presence of tetrahydrocannabinol with vitamin E acetate has been reported to be the reason behind the clinical presentation.⁶ EVALI has also been reported in the use of exclusive nicotine-containing products, suggesting other potential contaminants that can lead to diffuse alveolar damage.³

The evolution of e-cigarettes

E-cigarettes have undergone rapid technological evolution since their introduction, resulting in four main generations of devices with distinct designs and user characteristics. First generation e-cigarettes were disposable products that mimicked the look and feel of conventional tobacco cigarettes. They were neither rechargeable nor refillable and were discarded once the battery or e-liquid was depleted. Second generation devices introduced reusable

systems with pre-filled or refillable cartridges that could contain nicotine, cannabis, flavouring agents, solvents or other substances. These cartridges were typically attached to a battery pen, with the components often sold separately.

Subsequent designs have offered greater customisation and versatility. Third generation e-cigarettes, commonly known as “tanks” or “mods”, are refillable and allow users to modify both the device settings and the type of e-liquid used. Fourth generation devices, or “pod mods”, integrate refillable or pre-filled pods into compact and modifiable systems, available in various shapes, sizes and colours. These pod-based systems frequently contain nicotine or cannabis, with or without flavouring additives. This classification of e-cigarette generations is based on descriptions provided by the US Centers for Disease Control and Prevention.⁷ The vape pens, box mods and pod-based devices are the most commonly used vaping devices in 2020.⁶ The biggest challenge society faces with e-cigarette devices is how easily the vape pods containing the e-liquid can be modified.

A closer look at etomidate

Etomidate (chemical name R-1-[1-ethylphenyl]imidazole-5-ethyl ester) was initially developed as an antifungal agent, but was found to have anaesthetic, sedative and amnesic effects by activating GABA_A receptors.^{8,9} For general anaesthesia, etomidate is administered intravenously in measured doses. The use of etomidate to induce anaesthesia has the advantage of not inducing significant hypotension as well as causing minimal changes in heart rate. It is an ultra-short-acting (dose dependent: two to three minutes [0.15 mg/kg dose]; three to five minutes [0.3 mg/kg dose]) nonbarbiturate general anaesthetic used for rapid induction of anaesthesia with an onset of action of 30 to 60 seconds and a peak effect in one minute.⁸

The offending agent and the dangers that lurk within

Intravenous abuse of etomidate is not a new phenomenon and has been reported in the medical literature.¹⁰ Vapes are also becoming laced with etomidate and are marketed as “space oil” in Hong Kong and known as “Kpods” in Singapore.¹¹ Etomidate has demonstrated rewarding and reinforcing effects in male rodents, which are also seen in humans.⁹ Because etomidate was never developed for administration via the inhalational route, the extent of its pulmonary absorption has not been systematically studied. Intravenous use is known to suppress adrenal steroid synthesis which may lead to profound hypotension, especially in critically ill patients.⁸ As for adrenal suppression through the inhalation of etomidate, three cases have been reported in Hong Kong with patients between the ages of 15 and 17.¹² Reported symptoms include altered sensorium progressing to psychosis, hyperactivity and insomnia. Other serious adverse effects associated with abuse include nausea, vomiting, hypokalaemia, myoclonus, hypoxaemia and, in severe cases, death.^{10,11} Vigilance is required as there is a potential for the addition of other dangerous drugs to the Kpods, such as cocaine and methamphetamine.¹²

Substance abuse through inhalation to achieve intoxication is also not a new phenomenon. Volatile substances such as contact adhesives, toluene, petrol and volatile hydrocarbons have been used illicitly to achieve euphoria with detrimental effects for many years.^{13,14} Inhalation of such substances has been associated with severe organ damage and has been the cause of premature death in youths. Vape devices have also been used as conduits to deliver poisonous substances such as ketamine, a dissociative anaesthetic agent used for induction, pain relief and treating depression. Chronic inhalation of ketamine has been shown to cause mania, hallucinations and severe encephalopathy.^{15,16}

The vape device's ease of use also allows drugs like cannabis to be introduced into e-liquids that often already contain nicotine. The dual use of such substances has been cited as a gateway to harder drugs, long-term addiction and dependence on illicit substances.¹⁷ Certain vape devices contain nicotine in the form of benzoate salt, allowing high levels of nicotine delivery.¹⁸ Newer disposable devices with a 10 mL well of 5% nicotine (500 to 600 mg/device) e-liquid can deliver the nicotine equivalent of more than ten packs of cigarettes and can be modified to vary the level of nicotine delivery.¹⁹

The law in Singapore

Since 1 September 2025, etomidate and its analogues have been classified as Class C controlled drugs under the Misuse of Drugs Act. Individuals found to have used e-vaporisers containing etomidate are subject to graduated penalties based on the number of offences. First-time adult offenders may face a fine of up to SGD 700 (SGD 500 for individuals below 18 years of age) and up to six months of rehabilitation. Second-time

offenders are placed under mandatory supervision, which includes drug testing and rehabilitation for six months. Repeat offenders (third or subsequent offences) are liable to a 12-month regime of detainment at a Drug Rehabilitation Centre for treatment, rehabilitation and continued supervision with drug testing. For offenders below 16 years of age, mandatory supervision with drug testing for 12 months is imposed instead.²⁰

In contrast, importers, sellers and distributors of etomidate-laced e-vaporisers face substantially harsher penalties, including imprisonment of up to 20 years and a maximum of 15 strokes of the cane, reflecting the gravity of offences involving drug trafficking and distribution.²⁰

Seeking help

People who use etomidate-laced vapes should seek professional help promptly. Early intervention is essential for better recovery outcomes. In Singapore, vape users can make an appointment with the National Addictions Management Service.²¹ Those who voluntarily seek help will not face any penalties, nor will they have an offence record.

During rehabilitation, the focus will be on addressing addictive behaviour through education, counselling and support to help individuals overcome their addiction. Nicotine replacement therapy will only be considered if individuals show signs of nicotine addiction and withdrawal symptoms.

Conclusion

Etomidate misuse through vaping devices represents an emerging public health concern. Although reports remain limited, available evidence clearly indicates that etomidate-laced vapes are harmful.

Vape devices are excellent conduits for drug delivery and this itself poses significant risks. We need to be more vigilant and look beyond etomidate, as abusers and illicit marketers continue to be creative. The customisability of the vape device makes it a versatile Pandora's box, and authorities and healthcare professionals must always be alert and anticipate the potential of more dangerous adulteration in the future. ♦

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Kwee Keng is a principal pharmacist (clinical) from Tan Tock Seng Hospital. She is also a board-certified ambulatory care pharmacist (USA) and a collaborative prescribing practitioner. As the unit head overseeing pharmacy clinical team-based services, she has special interest in smoking cessation, anticoagulation, chronic disease management, community health and telehealth.



KPODS: ETOMIDATE IN A POD



Text by Dr Melvyn Zhang and Dr Lambert Low

Dr Zhang is a senior consultant at the National Addictions Management Service. He has a special interest in treating individuals with gaming disorders. He is also an assistant professor with the Lee Kong Chian School of Medicine, and has been recently identified as one of the world's top two percent most-cited scientists in 2025.



Dr Low is a senior consultant psychiatrist with a clinical focus on addictive disorders. He is an SMA Council member and the former Chief of the Addiction Medicine Department at the Institute of Mental Health. He received the Health Manpower Development Programme Award from NHG Health and completed a Master of Science in Addiction Studies with Distinction at King's College London in 2016.



Since July 2025, doctors across Singapore have been put on high alert with regard to the unfolding etomidate crisis. Etomidate, an imidazole-derived hypnotic agent, has conventionally been used for anaesthetic purposes.¹ However, in recent years, etomidate has been added as an adulterant in electronic cigarettes (e-cigarettes), and this has been reported in various countries, including Hong Kong,² China,³ and Singapore.^{4,5} Etomidate works as a positive allosteric modulator of the gamma-aminobutyric acid type-A receptor, resulting in an enhancement of inhibitory neurotransmission in the central nervous system.⁶ Locally, e-cigarettes that contain etomidate are known as Kpods. It is concerning that etomidate has been added to e-cigarettes, which hitherto were mostly associated in Singapore with nicotine use. This signifies first and foremost that one can no longer assume that any e-cigarette found locally contains just nicotine, and secondly, that e-cigarettes are conduits for the use of not just illicit drugs but also for other pharmaceutical products.

Acute symptoms following intoxication

When an individual smokes an e-cigarette laced with etomidate, they may experience symptoms including confusion, drowsiness, and incoordination. Such effects may also happen quickly given its rapid onset of action. Some of the more prominent neurological effects include that of weakness, dizziness and falls, and involuntary movements including that of tremors.⁷ If users inhale large amounts, this could predispose them to seizures, impaired consciousness and even a comatose state. Users of Kpods have been implicated in fatal road traffic accidents in Singapore, which are manifestations of etomidate's impact on the central nervous system as described above. Based on published case reports, it has been reported that individuals who abuse etomidate-laced vapes may experience a variety of psychiatric symptoms, such as suicidal behaviours, aggression and agitation.⁸

From our clinical experience, users have experienced a variety of acute effects after inhaling etomidate e-cigarettes, from

short-term memory impairment, slurring of speech and drowsiness to more serious consequences of experiencing seizures during withdrawal.

Psychological dependence and impact on daily functioning

The literature on chronic use of etomidate is limited, given that this is mainly an anaesthetic agent used acutely. From our clinical experience with regard to patients who have used etomidate chronically (ie, from months to years), many individuals report experiencing psychological dependence on etomidate-laced vapes, often describing strong urges and cravings to reuse these products to relive the sense of euphoria they provide. This makes it very difficult for them to stop its use. Some users are aware of the potential harms associated with their usage and recognise the impact on their overall functioning. They note that various aspects of their daily lives have been negatively affected by continued use, including their relationships with family members and their ability to focus at work. The longer the use has been, the greater the psychological dependence and the harder it was for them to break the cycle.

Medical complications

Qin et al⁹ and Chung et al,² in their case reports, have alerted academics and healthcare professionals to the potentially serious medical impact of the use of etomidate-laced vapes. The use of these vapes could result in adrenal insufficiency by inhibiting adrenal 11 β -hydroxylase. This is an enzyme which is instrumental in cortisol production, and the resultant adrenal dysfunction might result in blood pressure issues, adrenal hyperplasia and hypokalaemia. As the medical complications are generally managed in a general hospital setting once detected, this article focuses primarily on the psychiatric aspects of the use of etomidate-laced vapes.

Clinical assessment of individuals presenting with etomidate-laced vape use

Currently, there remain no validated tools or questionnaires for practitioners to

use to assess one's severity of etomidate addiction. The assessment of the clinical severity of one's addiction can potentially take reference to the existing substance use diagnostic criteria in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)*. The core aspects of substance use criteria in *DSM-5-TR* include the assessment of whether there is the presence of (a) impaired control, (b) social impairment, (c) risky use, and (d) tolerance and withdrawal.¹⁰ Often, patients may not be willing to share much about their etomidate use, which is not uncommon for an addiction. Hence, collateral information is especially important, and family members often help to provide important information pertaining to the patterns of etomidate use. This then helps the clinician distinguish whether somebody is just abusing Kpods or is dependent on it.

Typical treatment regimen

Individuals who are acutely intoxicated should be medically stabilised first, and laboratory investigations are critical to ascertain whether they have any medical complications following etomidate use, eg, checking electrolytes for potential hypokalaemia. Those who are medically stable can then be referred to social service agencies (SSAs) in the community or the National Addictions Management Service (NAMS) for further assessment. At these agencies, an assessment of the severity of etomidate addiction will be conducted and depending on the severity, they will then be recommended to undergo counselling-based rehabilitation programme at the SSAs or at NAMS.

Counselling interventions typically address one's motivation to change, triggers and cravings leading to one's usage, and assist the individual in making a recovery plan.

Updates about current regulation

Currently, etomidate has been listed as a Class C drug under the Misuse of Drugs Act. Abusers of etomidate will face fines and are required to attend rehabilitation for up to six months for the first offence with subsequent offences incurring

harsher penalties. These policies ensure that those who abuse etomidate get the necessary help and support to manage their condition, including addressing any addiction through appropriate psychoeducation and counselling support. We are hopeful that the current measures will stem the tide in this new wave of addictions while remaining mindful that etomidate will not be the last medication to be added to an e-cigarette. ♦

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VAPING

and the Recent Changes to Reporting Requirements

Text by Dr Chie Zhi Ying, Deputy Editor

Vaping has consistently been grabbing the headlines since the start of 2025 and we see many campaign posters against vaping in common areas like MRT train stations, bus stops and on housing estates' notice boards. With effect from 1 September 2025, Singapore has taken on whole-of-government efforts to tackle the growing global health crisis of vaping by imposing a suite of harsher penalties for both abusers and suppliers.

In line with the temporary classification of etomidate, the anaesthetic agent found in drug-laced electronic vaporisers (e-vaporisers) or vapes known as Kpods, as a Class C controlled drug under the Misuse of Drugs Act, a circular (Ministry of Health [MOH] Circular No. 54/2025, Health Services Authority [HSA] Circular No. 02/2025) was released to all registered medical practitioners to update on the measures to be implemented and provide guidance on the reporting and handling of etomidate e-vaporiser offenders with effect from 1 September 2025.

I share below a few clinical scenarios that a clinician may encounter in a primary care setting when seeing suspected or actual vape users for reference.

Scenario 1 – suspected user

In the first scenario, the medical practitioner encounters a suspected etomidate e-vaporiser user. In the

circular, it was stated that “medical practitioners will be required (under regulation 19 of the Misuse of Drugs Regulations) to report suspected etomidate e-vaporiser offenders to the Director, Central Narcotics Bureau (CNB) and the Director-General of Health (DGH), MOH within seven days of attending to the patient”.

Medical practitioners are to report to the CNB and DGH via the eNOTIF portal (<http://bit.ly/4o6CoIJ>), where they will be asked to log into the portal using their Singpass. This reporting workflow is similar to the existing reporting of suspected drug addicts.

The circular also provides a definition for suspected etomidate e-vaporiser offenders, which encompasses “individuals who present to healthcare institutions or clinics in possession of any e-vaporisers or who admit to consuming e-vaporisers, **and** who show any of the following signs and symptoms suggestive of etomidate intoxication such as unsteady gait, confusion or slurred speech (see Annex for more details).” The Annex referred to classifies the signs and symptoms of etomidate intoxication into central nervous system, respiratory, cardiovascular effects and pulmonary/chemical injury.

Depending on the place of practice, if a patient appears intoxicated or unwell with symptoms suggestive of

etomidate intoxication, there might already be triaging done by nurses or clinic assistants where a preliminary history (taken from the patient or the person(s) accompanying the patient) and vitals such as blood pressure and heart rate could help guide the urgency of the case. If patients are clinically unstable, the main aim is to try stabilising them, call the ambulance and send them to emergency departments for further management.

Knowing that vaping is illegal, it can be challenging for doctors to ask about the use of vapes and receive honest answers from patients. Doctors need to prepare for patients' responses to questions on vapes, which can range from straight-up admitting to its use to defensiveness and even agitation or violence (both verbal and physical). As such, it is indeed important to build and maintain rapport with patients so that help can be rendered to them. One way to help in screening for vape use is to ask about more socially acceptable substances such as caffeine, alcohol and tobacco, which can help to normalise the questioning before moving on to more sensitive topics like the use of vapes and drugs. Another way would be to signpost to patients that you are going to ask more sensitive questions and explain the rationale for doing so. In addition, the doctor can also tell

patients that he/she routinely asks these questions in his/her practice to all patients who present with similar symptoms and signs to again normalise the line of questioning.

It is important to give your patients the time and space to respond to your question on vape use. Regardless of their responses, doctors should always remain professional and non-judgemental, and acknowledge patients' responses calmly, especially when patients admit to the use of vapes.

Since doctors are required to report to CNB and DGH, patients should be informed of the reporting in a tactful and professional manner. Again, the doctor should explain the requirement for reporting, but it is important to note that at this point, doctors are merely informing and not obtaining consent from patient with regard to the reporting.

For documentation, medical practitioners are requested to record all suspected or confirmed etomidate e-vapouriser offender cases in the electronic medical records system as stipulated in the circular.

In addition, all healthcare organisations have their respective internal notification/reporting workflows to inform the management teams about these cases, and it would be vital to do so to close the case.

Scenario 2 – users seeking medical help

In the second scenario, etomidate e-vapouriser users may also present at healthcare institutions and clinics to seek medical advice for their addiction, following the Government's call for such individuals to step forward for help. For

such individuals who voluntarily come to seek help, hospital or clinic staff may refer patients to the Stop Vaping website (<https://bit.ly/47RkYdy>) for information on agencies that provide the QuitVape Programme to support individuals who wish to quit vaping.

If such patients are attended to by registered medical practitioners, they too will need to be reported to DGH and CNB. There is no need to notify or report to HSA for such cases. Again, patients should be told in a professional manner that reporting is required by doctor. It is important that doctors remain supportive of patients' efforts to quit.

Scenario 3 – detected possession by patients

If the doctor detects any illegal possession of e-vaporisers in patients, in accordance with the circular, he/she can contact HSA to support their enforcement efforts through two recommended channels:

- Submit information through the online reporting form at <https://www.go.gov.sg/reportvape>.
- Call the vape reporting hotline at 6684 2036 or 6684 2037 (operational daily, including weekends and public holidays, from 9 am to 9 pm).

If the patient hands over the e-vaporiser, it will be advisable to retain and safekeep the e-vaporisers, document them in handover notes and immediately notify HSA at 6031 3139. The HSA officer will advise on the appropriate follow-up actions.

If the doctor requires any assistance in handling e-vaporiser cases, or if there are any queries or concerns, the doctor may also contact the 24/7 HSA hotline set up for healthcare institutions at 6031 3139.

Concluding thoughts

As the nation comes together to combat the scourge of vaping, let us do our part to support these efforts and at the same time, continue to provide care and support for patients coming through our doors. ♦

The MOH-HSA circular on the reclassification of etomidate contains relevant information, links and QR codes, and can be accessed at <https://bit.ly/4o7F2gT>.



Dr Chie is a consultant family medicine specialist working in NHG Polyclinics. She also holds a Master of Public Health from the National University of Singapore and is a Fellow of the Royal Society for Public Health. She enjoys freelance writing and has written for Chinese dailies *Lianhe Zaobao*, *Shin Min Daily News* and health magazine *Health No. 1*.



Regardless of their responses, doctors should always remain professional and non-judgemental, and acknowledge patients' responses calmly, especially when patients admit to the use of vapes.

Why Supporting Medical Students from Low-Income Families Matters to Society



Text by Sharmilah Banu, Executive, SMA Charity Fund

This article was first published on the SMA Charity Fund (SMACF) website.

There is something quietly powerful about a student choosing medicine not just as a career, but as a calling, especially when that journey begins with hardship.

At SMACF, we often meet aspiring doctors who have walked harder paths. Their dreams are as bold as any, but the weight of financial stress, family responsibilities and systemic barriers can make the road ahead feel impossibly steep. And yet, when given support, these students rise with resilience, compassion and a fierce commitment to serve.

Supporting medical students from low-income families is more than financial aid. It is a choice to invest in a future healthcare system that is more empathetic, more representative and ultimately, more human.

Empathy as a clinical skill

While medical school teaches anatomy and pharmacology, life experiences teach empathy. Students who have faced hardships often bring deep emotional intelligence into their practice. They may listen a little more closely and/or advocate a little more fiercely.

They carry not just textbooks but also varied life experiences, and that can make all the difference at a patient's bedside. These students may thus be better positioned to connect with patients whose unusual circumstances cause them to feel unseen. And when patients feel seen and understood, trust grows. This trust is the heartbeat

of healing, especially in communities that may be comparatively unseen or underserved.

Reflecting the communities we serve

Healthcare is enhanced when it represents the people it serves. Many students from low-income families come from diverse backgrounds and may speak different languages and dialects. When they become doctors, they can bring broadened cultural understanding into hospitals and clinics. Their presence in medicine widens the lens through which care is delivered, enhancing cultural competence, sensitivity and understanding.

Returning to serve

Many of our bursary recipients express a desire to return to their roots, to serve in the very communities that shaped them. Whether they return to work in a small neighbourhood clinic or a polyclinic in a heartland estate, they are well positioned to identify potential gaps that may exist in these communities because they have grown in them.

By supporting their education, we are planting seeds of care in places where help and close attention are needed.

A fairer, stronger future

Every time we support a student who would not otherwise be able to afford medical school, we help rewrite the rules of access. We say: brilliance is not reserved for the privileged.

These students often go on to break cycles of poverty, not just for themselves, but for their families. And in time, many of them give back to the community, creating a ripple effect of compassion and care for the next generation.

More than a donation: A declaration

Supporting medical students from low-income families is not simply an act of charity, it is also a declaration of the kind of society we want to live in: one where potential is not measured by wealth and where healthcare is shaped by all who can contribute.

When we stand behind these students, we are not just funding their dreams. We are building a healthcare system that listens more deeply, serves more widely and heals more completely.

And that benefits us all. ♦

To learn more or to donate to our cause, please visit
<https://www.smacf.org.sg>
or reach out to us at
smacf@sma.org.sg.





Framing Our Memories

As 2025 draws to a close, members of the Singapore Medical Society of the United Kingdom each share with us a picture from their favourite memory of the year, accompanied by their thoughts of the scene.

Text and photo by Rachelle Lai, Year 2 Medicine, University of Glasgow



As the end of 2025 approaches, I often find myself grasping in murky waters, in feeble attempts to fish out a singular moment that encapsulated my year. For how can 12 months of emotions, lessons and memories be distilled into a brief pocket in time, cemented in a digital frame? Yet, I chose this crater to be my emblem of 2025: a reminder that even after violent chaos, what remains is not devastation but a new landscape – reshaped by upheavals. I am reminded that not every obstacle is a hindrance, nor is every step of the journey intentional. The footsteps we leave behind often reveal their meaning in quiet retrospect, miles from where the ash has settled.

Text and photo by Winston Tham, Year 4 Medicine, University College London

They say that medicine is a calling and is fuelled by passion, but I believe that one's drive cannot be sustained without support from friends and family. After all, how can one still enjoy medicine if there is no one to share the interesting facts and cases encountered, or to wallow together with after the stress of constantly being on your toes. Being away from my primary support – my family – underscores the value of friendships in medicine, as they may be the only ones who can understand you at that very moment. These are my friends: the family away from family who will continue to support each other through and through.





Text and photo by Isabelle Lee, Year 2 Medicine, King's College London

A peculiar feeling of yearning would overcome me whenever I traversed the streets of Singapore during my summer break. Having been away for nine months, Singapore felt so unnervingly foreign yet familiar at the same time. Perhaps what had changed was my perspective of home. The SG60 decorations adorned across the facade of

the National Gallery, set against the backdrop of the evening sun, showed me that Singapore does have its own little charm, something that I have grown to miss during my time abroad. The SG60 celebrations brought me to tears and served as a poignant reminder that no matter where I may be, Singapore will always be a place I can call home.

Text and photo by Joshua Malcolm, Year 5 Medicine, University College London

A splendid beam splits the sky – an iridescent arc that cuts through the muddy drone of the city beneath. A rainbow, a glint at the corner of your eye, calling you to lift your gaze from the rain-soaked earth and behold nature's own prism. The promise that behind a sullen sky the

sun still shines; behind thick clouds and uncompromising rain, the sun still shines.

The light cuts through the darkness and drapes its victory across the sky in awesome technicolour. There is always a new day to learn, to love and strive, and to wonder at every opportunity.



Text and photo by Vamakshi Krishnan Sangle, Year 2 Medicine, University of Glasgow

My favourite memories of my first year are those where I spent time walking around Glasgow with people who have come to be some of my closest friends. They helped me fall in love with a city so different from home.

Text and photo by Nicholas Lim, Year 5 Medicine, University of Leicester

Heading into finals season, I am reminded of how important it is to have interests outside of medicine. Over the last year, this reminder came in the form of making fun little caffeinated drinks in between study sessions. What started as a way to get a quick pick-me-up soon evolved into a full-blown project as I experimented with different syrups, flavour combinations and brewing

methods. The process was extremely therapeutic, giving me something creative to focus on that did not solely involve burying my head in notes and question banks. This simple act of self-care brought much joy. Even now, amid intense revision for the upcoming Medical Licensing Assessment, it continues to keep me balanced, energised and ever so slightly saner.



Text and photo by Christic Moral, Year 2 Medicine, King's College London



I am not really a morning person. Faced with the choice of sleeping in or going for a hike at Richmond Hill on little sleep with a dull headache, I nearly picked the former. Still, I had made a promise to some new friends, who were bombarding me with texts and calls to check if I was awake yet. I consoled myself, saying it would be a quiet morning in nature. Instead, the company of my friends turned it into a day of singing, laughing and even dancing along winding paths. The views of rolling hills, grazing deer and blue skies were beautiful, but memories of shared joy are what linger the most.

Text and photo by Alicia Chee, Year 2 Medicine, University of Glasgow

This photo was taken at the Scottish National Cross Country Championships in February 2025. I have been running since secondary school, but after my last National School Games race in 2023, I thought I would hang up my spikes for good. Somehow, I found myself lacing up for a cross-country race again – this time for the mud, the cold and the thrill of racing in a singlet at 10 degrees Celsius with the Glasgow University Hares and Hounds Running Club. The course was tough, but what I will remember most is the atmosphere: the cheers, the laughter and the team spirit that reminded me why I fell in love with this sport.



Text and photo by Jay Shao, Year 2 Medicine, University of Liverpool



I often find myself heading down to the city centre alone, to either run errands or seek tranquillity in my deepest thoughts. Admiring the serene waters and modern skyline of Liverpool always reminds me of my life back in Singapore, and that bold otherworldly decision I made with the tenacity to leave everything behind and fly halfway across the world to a stranger place. And while I have adapted and enjoy my time here, I cannot help thinking back to what my friends and family would be doing back home, as if time had stopped there. It seems like living a double life, as a swarming student moulded as a puzzle piece of an ever-competitive society and as a peaceful international student just enjoying life. ♦

Guiding the Conversation:

How GPs can Champion Advance Care Planning

by the Agency for Integrated Care (AIC)



When Dr James Cheong sits with his patients, the conversations may go beyond blood pressure readings or medication refills. Sometimes, they drift into reflections about a loved one's illness, a neighbour's sudden hospitalisation or the uncertainty of what lies ahead.

For Dr Cheong, these are not just passing remarks. They are opportunities to open the door to important conversations about Advance Care Planning (ACP).

"Just as we plan for many other aspects of life, it is equally important to plan ahead for our health," he says.

The GP's Unique Role

As a patient's trusted health advisor, GPs often know their patients best – their worries, family circumstances and what truly matters to them. This puts GPs in a unique position to advocate ACP. Yet, as Dr Cheong acknowledges, busy clinics and short consults can make the topic feel daunting.

ACP captures the patient's voice and guides us, as healthcare professionals, and their loved ones in understanding their wishes and preferences should they lose mental capacity.



Dr James Cheong

Clinical Sub-Lead of
Central-North Primary Care
Network (PCN)

"With the growing complexities of healthcare and an ageing population, primary care consultations are often filled with numerous tasks within limited time. However, talking about ACP does not require dedicating an entire consultation," he explains.

"By breaking ACP conversations into bite-sized discussions and pacing them over time, we can make the process more manageable for both patients and clinicians."

Overcoming Misconceptions

Despite growing awareness, misconceptions remain. Dr Cheong frequently encounters patients who perceive ACP as irrelevant as they do not anticipate future health risks.

"Patients often assume that their loved ones and healthcare team will know what to do when the time comes," he shares.

While Dr Cheong is heartened by the patient's confidence in their loved ones knowing absolutely what needs to be done in times of crisis, he feels that gentle exploration can uncover gaps and uncertainties.

He draws on a familiar analogy: "ACP is a proactive step in future planning, much like purchasing insurance or making financial investments. Both are undertaken not because a crisis is imminent, but to prepare for the unexpected."

"In the same way, ACP protects patients from undesired treatments and outcomes, while ensuring that their care remains aligned with their goals, values and preferences," Dr Cheong emphasises.

Recognising the Right Moments

One may not need a dramatic event or illness to trigger an ACP conversation. In fact, it can begin in everyday encounters.

Dr Cheong shares that patients often reveal their readiness when they start thinking about other forms of planning such as making a Lasting Power of Attorney (LPA). Others may recall personal experiences like a family member's medical episode and express what they would want, or hope to avoid, if they find themselves in the same situation.

"Times of uncertainty, such as when patients are seeking clarity about healthcare choices and how these fit with their values, are also meaningful opportunities to begin these conversations," he added.

Building Confidence in Advocacy

To support GPs in advocating ACP, AIC and the College of Family Physicians Singapore (CFPS) launched a new ACP advocacy training programme in October 2025. The inaugural session, led by Dr Cheong, introduced a video resource that is now available on the CFPS website, with additional information on AIC's Primary Care Pages.

These resources aim to help GPs to:

- identify opportunities and access readiness for ACP conversation
- guide patient by explaining ACP benefits and encouraging periodic plan reviews.

ACP Care Protocol Launching in January 2026



ACP will be rolled out as one of the clinical Care Protocols under Healthier SG from January 2026.

The new protocol provides GPs with structured workflows, referral pathways and standardised materials to guide ACP discussions and connect residents to the right touchpoints either through self-initiated ACP on myACP or facilitated ACP at Public Healthcare Institutions and Community Nodes.

The Gift of Clarity

Dr Cheong frames ACP documentation as serving dual purposes.

"I emphasise to my patients that documenting an ACP is not only a gift to themselves, but also a meaningful way to ease the burden on their loved ones when difficult decisions need to be made," he shares. "It helps them gain clarity and ease moral distress along the way."

For his patients and their families, the benefits of ACP are tangible. Dr Cheong recalls many who describe "a sense of relief and fulfilment" after completing their ACP.

"At its core, ACP is about understanding what matters most to our patients, and as family doctors, we are uniquely positioned to guide them through these conversations."

Guiding your Patients in 4 Steps

When your patients signal their readiness to start on their ACP, you can help them through the process in four steps:

1. Reflect

Consider values, quality-of-life goals and treatment preferences.

2. Select Nominated Healthcare Spokesperson (NHS)

Appoint up to two trusted individuals aged 21 or older who will respect wishes and communicate effectively.

3. Document ACP

Log in to myLegacy@LifeSG to record preferences and appoint NHS. Nominees confirm roles online. ACPs are registered in the National Electronic Health Record (NEHR).

4. Review Regularly

Revisit at key milestones: new decade, diagnosis or major health changes. Can revise anytime while retaining mental capacity.

For patients with serious illnesses or those who prefer guided support, facilitated ACP sessions remain available through trained healthcare professionals. These sessions help residents explore care preferences in depth, ensure their values and wishes are accurately captured, and provide additional support when discussions are more complex or emotionally challenging.



Access the myACP portal and GP resources at for.sg/myacp-gp or by scanning the QR code.

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Date	Topic	Speaker
7 February 2026 Saturday 1.30 pm	Medical Records and Access of NEHR	Dr Peter Chow Senior Consultant, Changi General Hospital
25 April 2026 Saturday 1.30 pm	Medical Certificates	A/Prof Anantham Devanand Senior Consultant, Singapore General Hospital (SGH)
11 July 2026 Saturday 1.30 pm	Certification of Death	A/Prof Lai Siang Hui Senior Consultant, SGH
19 September 2026 Saturday 1.30 pm	Coroner's Inquiry Process: What Doctors Need to Know	Mr Eric Tin Senior Partner and Co-Head, Donaldson & Burkinshaw LLP

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