

ACEINSIGHTS

Driving better decision-making in healthcare

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The latest move to further involve patients in ACE's health technology evaluations could help achieve better patient-centred outcomes.

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PRIMED FOR IMPROVED OUTCOMES IN TYPE 2 DIABETES

The ACE Clinical Guidance (ACG) and Clinical Update Service (CUES) educational visiting (EV) programme equip primary healthcare professionals to help patients better manage type 2 diabetes mellitus.

In Singapore, diabetes was reported to be the country's sixth leading cause of mortality and burden of disease combined in 2019. The National Population Health Survey 2022 found that about 1 in 12 (8.5 per cent) Singaporean residents aged 18 to 74 years had diabetes mellitus.

Globally, more than 95 per cent of people diagnosed with diabetes have type 2 diabetes mellitus (T2DM). To improve patient care and outcomes and assist primary healthcare professionals in their clinical decision-making, ACE released an ACE Clinical Guidance (ACG) in May 2023 on "Type 2 diabetes mellitus – personalising management with non-insulin medications" and have rolled out a Clinical Update Service (CUES) educational visiting (EV) programme for managing T2DM. These initiatives, aimed at providing timely, practical and customised support, work together to deliver significant benefits to both healthcare professionals and their patients.

EVIDENCE-BASED RECOMMENDATIONS

In Singapore, despite the emergence of new medications with cardiovascular and renal benefits, metformin and sulphonylureas remain the main treatments for patients with T2DM.

The ACG on T2DM aligns with recommendations from other international clinical guidelines. It encourages healthcare professionals to optimise management by personalising selection of non-insulin T2DM medications based on patient comorbidities and risk factors,

including those related to cardiovascular and renal outcomes. The ACG also shares guidance on setting individualised glycaemic targets, principles of lifestyle intervention, practical considerations for prescribing decisions, and key points for adopting a patient-centred approach – with practical examples.

According to Associate Professor Bee Yong Mong, Head & Senior Consultant of the Department of Endocrinology in Singapore General Hospital, who chairs the ACG Expert Group, clinicians can apply the recommendations in the ACG to meet their patients' needs, and enhance health outcomes and quality of life.

"Personalising type 2 diabetes management with non-insulin medications is crucial in achieving optimal glycaemic control and reducing the risk of cardio-renal complications. Clinicians are encouraged to read the ACG to ensure that they provide evidence-based and individualised care for patients based on their unique needs and comorbidities," says Assoc Prof Bee.



ASSOCIATE PROFESSOR BEE YONG MONG

Chairperson, ACG Expert Group and Head & Senior Consultant, Department of Endocrinology, Singapore General Hospital



DR CHUA YING XIAN
Head, Pioneer Polyclinic

For Dr Chua Ying Xian, Head of Pioneer Polyclinic, caring for patients with T2DM is a part of his practice. When the ACE was published, the recommendations were included in National University Polyclinics' (NUP) internal clinical practice guidelines, and Dr Chua started to incorporate them into his practice, as appropriate. "The up-to-date and concise information is practical and useful in helping clinicians make better-informed choices", shares Dr Chua.

ACCOMPANYING RESOURCES TO FURTHER SUPPORT T2DM MANAGEMENT

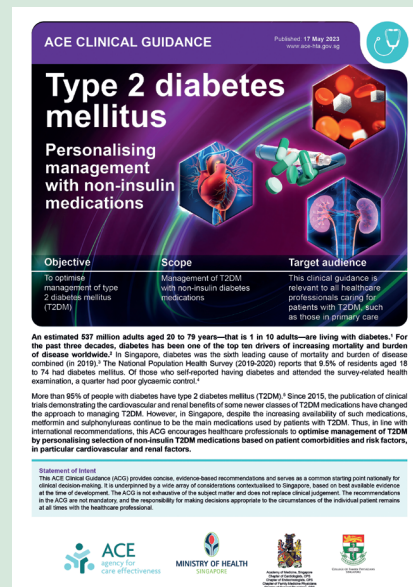
In addition, Dr Chua finds the supplementary clinician infographic and medication table developed by ACE particularly useful during his consultations with patients living with T2DM, especially those with

Clinicians are encouraged to read the ACE to ensure that they provide evidence-based and individualised care for patients based on their unique needs and comorbidities."

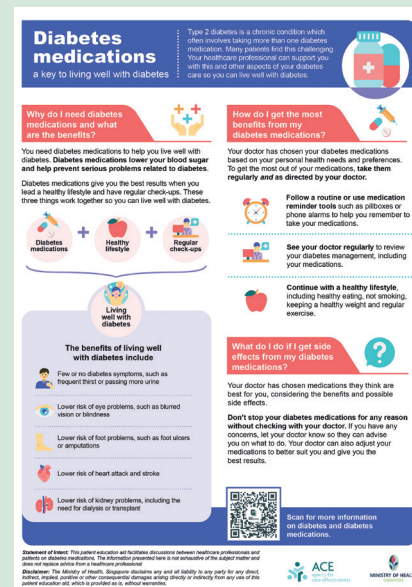
ASSOCIATE PROFESSOR BEE YONG MONG,
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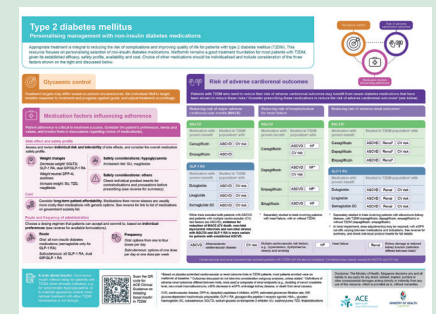
HAVE YOU READ OUR LATEST T2DM RESOURCES?



Apply the **latest recommendations** to optimise T2DM management for your patients.



A handy **tool** to facilitate effective discussions with your patients around the importance of medications as part of overall T2DM management.



A comprehensive **guide** to the key factors and information to consider before prescribing medications for patients with T2DM.



Click **here** or scan the QR code to access our latest T2DM resources.

multimorbidities such as renal impairment and heart failure. "The medication table provided an overview of the dose adjustments required in specific clinical conditions such as renal impairment as well as common side effects to counsel patients during initiation or intensification," he states.

The patient education aid is another accompanying resource to highlight the benefits of T2DM medications and reinforce the importance of adhering to treatment. "This can be used to facilitate discussions with patients as they make decisions for their care," Dr Chua remarks.

CUSTOMISED ACE CUES EDUCATIONAL VISITS

Challenges in T2DM management vary depending on a doctor's practice setting and patient profiles. To support clinicians in their clinical

decision-making, ACE is offering an EV programme on the management of T2DM with non-insulin medications in primary care. The CME-accredited programme offers healthcare professionals a convenient way to stay updated on new developments in clinical practice.



(Aimed at primary care practitioners/generalists; limited slots available.)

Scan or click here to sign up for ACE's personalised educational visiting sessions



INSIDE ACE: A PEEK INTO WHAT WE DO

Kan Shu Jun, Senior Specialist, Evidence to Practice Office, shares how she taps on best available evidence to help healthcare professionals make informed decisions.

What do you do at ACE?

As part of the Evidence Implementation team under the Evidence to Practice Office, I support healthcare professionals in their clinical decision-making, in line with best available evidence. To do so, I study and understand the clinical issue well and collaborate closely with different stakeholders to identify key care gaps and associated barriers. With these considerations in mind, I develop and implement interventions under the ACE Clinical Update Service (CUES). Some of the activities our team has run include educational visiting, clinical resources, webinars, and point-of-care



information technology reminders. We are always exploring new ways to help healthcare professionals with effective clinical management and improve outcomes for patients.

What is a misconception that people tend to have about your work?

When we first launched educational visiting, we obtained practice-specific information to tailor the

discussion to the doctors' needs, experience and expertise.

Initially, some doctors were under the impression that I was there to audit their practice. However, they gradually understood how this personalised approach helped to contextualise the clinical updates to their specific needs and to incorporate evidence-based recommendations into their practice.

What are the most fulfilling aspects of your job?

The barriers to evidence implementation are multifaceted and the journey to carve out fit-for-purpose interventions for different situations is a challenging one. However, the ultimate goal of improving patient health outcomes resonates strongly within our team. It is something we work towards.

I feel encouraged when those whom we've engaged with give positive feedback on the usefulness of our resources and activities or share that they have incorporated changes to their practice according to our recommendations.

A COLLABORATIVE APPROACH TO SINGAPORE'S HEALTHCARE

The ACE Consumer Panel Co-Chairs explain what drives them to advocate for patient involvement in healthcare decision-making.



The ACE Consumer Panel, with ACE's Executive Director Dr Daphne Khoo (fifth from right).

In April 2022, the ACE Consumer Panel was established to represent the collective voice of healthcare consumers and provide strategic advice to ACE on consumer engagement and education initiatives.

Since then, the Panel has played a crucial role in guiding the content, format and communication strategies of ACE's education resources so that they meet the needs of patients and encourage shared healthcare decision-making. They also advocate for greater patient involvement in health technology assessments (HTAs).

The Panel is co-chaired by Adjunct Professor Lau Tang Ching (Chairperson, The National Arthritis Foundation and Senior Consultant, Division of Rheumatology, National University Hospital), and Dr Ritu Jain (President, Dystrophic Epidermolysis Bullosa Research Association (DEBRA) Singapore & DEBRA International).

WORKING TOWARDS MORE PERSONALISED CARE

With his extensive professional and voluntary experience in Singapore's healthcare system, Prof Lau plays a key role in identifying ways to include patient and carer voices in ACE's work.

He expects patient involvement in healthcare decision-making to grow in importance as Singapore's ageing population demands more personalised and patient-centred care.

"Singapore has already taken steps to promote patient involvement in healthcare decision-making, such as through the establishment of patient feedback and engagement programmes. These initiatives are likely to continue and expand in the future," says Prof Lau.

Advancements in technology, such as telemedicine and digital health tools, are also helping to increase the ways people can become active participants in their healthcare decision-making. "For example, patients can use online portals or mobile apps to access their health records, communicate with healthcare providers and participate in virtual consultations," says Prof Lau.

However, with increased opportunities also come challenges such as cultural and language barriers, health literacy issues, and concerns around privacy and data security which may hinder increased patient involvement.

"To overcome these challenges, healthcare providers can focus on improving health literacy, providing

education and resources in multiple languages, and ensuring that patients are fully informed about their rights and the implications of their decisions," he suggests.

PROMOTING MEANINGFUL ENGAGEMENT

ACE Consumer Panel Co-Chair Dr Jain is a keen patient advocate who believes the Panel's work can be instrumental in advancing the country's healthcare system.

"Singapore is relatively conservative in its approach to healthcare and remains top-down in decision-making. Therefore, ACE's involvement of patients in critical and meaningful healthcare decision-making is a game-changer," she says. In addition, she has witnessed a ripple effect with other Ministry of Health departments taking patient engagement more seriously, such as the Sector Development & Commissioning Division, which oversees fee benchmarking.

"No effective healthcare system can – or should – make decisions for patients without meaningfully engaging them," says Dr Jain.

The Panel encourages increased patient involvement through dialogues and roundtables. "ACE has shared its processes in a transparent fashion and invited critical questions and feedback through various dialogue opportunities," shares Dr Jain.

Looking ahead, she hopes to see ACE expand its scope of work in patient engagement. "I hope that future initiatives will include outcomes that patients care about, unmet needs, quality of life concerns and patient hopes for therapies."



ADJUNCT PROFESSOR LAU TANG CHING
Chairperson, The National Arthritis Foundation and Senior Consultant, Division of Rheumatology, National University Hospital



DR RITU JAIN
President, Dystrophic Epidermolysis Bullosa Research Association (DEBRA) Singapore & DEBRA International



ACE SHINES AT ISPOR EUROPE 2023

ACE representatives joined global healthcare leaders at the ISPOR Europe 2023 conference, which was held from 12 to 15 November in Copenhagen, Denmark. The international scientific conference focuses on promoting health economics and outcomes research (HEOR) excellence, which provides a framework for improving healthcare decision-making.

Led by Chief HTA Officer Adj A/Prof Ng Kwong Hoe, the team comprising Ms Solana Bernita Cheow; Mr Melvin Wong; Ms Tan She Hui; Ms Winnie Foo and Mr Zhou Junyang delivered insights from five studies to more than 4,000 HEOR professionals. These include cost-effectiveness analyses as well as utilisation and outcomes evaluations of health technologies. It was an excellent opportunity to connect with global professionals to discuss the role of health economics and outcomes research in shaping policy. Click [here](#) to view the posters.



From left: Mr Zhou Junyang; Chief HTA Officer Adj A/Prof Ng Kwong Hoe; Ms Solana Bernita Cheow; Mr Melvin Wong; Ms Winnie Foo and Ms Tan She Hui.

ERYTHROPOIESIS-STIMULATING AGENTS FOR TREATING ANAEMIA

Learn how erythropoiesis-stimulating agents helped ease the symptoms of anaemia for a patient with chronic kidney disease

In 2017, Mr Tee Kim Soon, 62, was diagnosed with chronic kidney disease (CKD). In CKD, the kidneys cannot produce enough of a hormone called erythropoietin. This may lead to insufficient red blood cells in the body and the development of anaemia, which reduces the quality of life in patients. In Mr Tee's case, he experienced symptoms of fatigue, shortness of breath, and frequent bouts of dizziness due to anaemia. "These symptoms prevented me from leaving the house for long periods. When I did go out, I had to take frequent breaks," shared Mr Tee.

Mr Tee was initially treated with iron supplements to manage the anaemia. When his condition deteriorated in 2018, Mr Tee was prescribed epoetin beta, a short-acting erythropoiesis-stimulating agent (ESA) that stimulates the bone marrow to produce more red blood cells. Unfortunately, after three doses of epoetin beta, he developed a skin rash and itch, which was assessed by a dermatologist to be a possible allergic reaction to the medication. Hence, treatment with epoetin beta was halted.

As the anaemia worsened, Mr Tee was re-challenged with epoetin beta, but the itching returned each time,

Evidence-based care — which applies the best available research to clinical care — is essential to maintain a sustainable health ecosystem that can balance a population's healthcare needs with the overall costs to society."

DR KWEK JIA LIANG,
Senior Consultant, Department of Renal Medicine,
Singapore General Hospital

causing significant discomfort and frustration. "I felt disheartened as I did not know what was causing the itch. This led to a lot of inconvenience for my family and me — conversations were difficult because of the constant and overwhelming itch," recalled Mr Tee.

Dr Kwek Jia Liang, a Senior Consultant with the Department of Renal Medicine at the Singapore General Hospital, who is Mr Tee's treating physician, noted that, despite optimising phosphate control and dialysis regimen, the itch persisted. "While Mr Tee requested to halt epoetin beta treatment again and declined further dermatology review, he still required an ESA, barring which he would have to undergo regular blood transfusions," said Dr Kwek.

Therefore, Dr Kwek recommended that Mr Tee start treatment with darbepoetin alfa, a long-acting ESA that was included on the MOH List of Subsidised Drugs in 2022. Thankfully, Mr Tee was able to tolerate darbepoetin alfa, and he responded well to treatment with improvements in haemoglobin levels. This was a huge relief to Mr Tee. "Since being prescribed with darbepoetin alfa, the itching has reduced greatly and is more bearable. I also don't feel dizzy so easily, and my general outlook on life has improved," he shared. Dr Kwek added that the



National Kidney Foundation dialysis centre continues to monitor Mr Tee's progress, and titrates the dose of darbepoetin alfa to optimise his anaemia management.

THE IMPACT OF EVIDENCE-BASED CARE

Currently, there are several ESAs listed on the MOH List of Subsidised Drugs to provide more treatment options for patients with anaemia. These ESAs include short-acting agents (epoetin alfa and epoetin beta), and long-acting agents (darbepoetin alfa and methoxy polyethylene glycol-epoetin beta).

As the national health technology assessment (HTA) and clinical guidance agency in Singapore, ACE conducts evidence-based evaluations of health technologies to inform subsidy decisions made by MOH. The evaluations include a review of clinical and economic evidence to determine how well health technologies work in relation to their cost. ACE also negotiates prices with companies, and seeks expert views from clinicians and patients.

According to Dr Kwek, ACE's work helps clinicians stay updated on the clinical and cost-effectiveness of various treatments, thereby enabling clinicians to make better-informed decisions for their patients. "Evidence-based care — which applies the best available research to clinical care — is essential to maintain a sustainable health ecosystem that can balance a population's healthcare needs with the overall costs to society," concludes Dr Kwek.



DR KWEK JIA LIANG
Senior Consultant,
Department of Renal Medicine,
Singapore General Hospital



Mr Tee Kim Soon can now conduct his daily activities with greater ease.

UPCOMING EVENTS



VALUE-BASED HEALTHCARE CONFERENCE 2024

22-23 AUGUST 2024



Join us at the 2024 ACE Value-based Healthcare Conference on 22 and 23 August to participate in discussions and gain insights into the advancements of healthcare, challenges and how to improve health outcomes. It will be a great networking session with both international and local experts.



Scan or click here to keep up-to-date of ACE's 2024 Value-based Healthcare Conference programme details and registration fees.

GIVING PATIENTS A VOICE IN HEALTHCARE EVALUATION

Patients and caregivers can now suggest which drugs and medical devices they would like ACE to evaluate, a significant stride towards achieving better patient-centred outcomes in Singapore.

Patients, carers and patient organisations now have a bigger role to play in the health technology assessment process that ACE follows when evaluating the effectiveness, safety and value of health technologies. They can now suggest which drugs or medical devices they would like ACE to evaluate as part of its annual call for topics.

Traditionally, the annual call only went to clinicians from public healthcare institutions. This helped ensure that the health technologies selected for evaluation filled therapeutic gaps in clinical practice. Expanding the call to include patients



and carers reflects ACE's enhanced focus on patient-centred healthcare in Singapore and recognition of the important role their voices play in decision-making.

PATIENTS' LIVED EXPERIENCES HELP INFORM TECHNICAL EVALUATIONS

In August 2022, ACE started incorporating patient insights into HTA evaluations for drug topics.

All responses are then included by the Consumer Engagement and Education (CEE) team in ACE's evaluation report and are used to inform funding recommendations for health technologies made by the Ministry of Health's Advisory Committees. Such insights provide decision-makers with evidence that goes beyond data captured in clinical trials and helps to guide their funding decisions, so they are relevant to local practice and address patients' needs.

To support the effective participation of patients and carers in ACE's work, the CEE team has developed a comprehensive process and method guide as well as supporting factsheets that explain how patients can be involved. The team has also developed a patient glossary containing simple definitions of technical terms that are often used in ACE's HTAs. Other useful references are also available on ACE's website.



[Click here to find out how to suggest health technologies for ACE to evaluate.](#)

SPOTLIGHT

ENGAGING PHARMACEUTICAL COMPANIES

Last July, ACE conducted our first in-person industry briefing since 2018. Held at the College of Medicine Building, the event was attended by more than 130 representatives from pharmaceutical companies.



MAINTAINING QUALITY WHILE PURSUING EFFICIENCY

Our colleagues from the Evidence to Practice Office represented ACE at the 18th annual Guidelines International Network conference in Glasgow, Scotland, in September 2023. Themed "Maintaining quality while pursuing efficiency", the event gathered international experts to discuss the latest advancements in clinical guideline development, adaptation, and implementation. Head (ETPO) Dr Phyllis Kim, together with some members of the ETPO team, Ms Valentina Ricci, Dr Bhone Myint Kyaw, Ms Ong Hui Dhing and Dr Ong Yih Ching, presented their insights on developing impactful and locally relevant clinical guidances.

EVIDENCE AND IMPLEMENTATION SUMMIT CONFERENCE

In October 2023, our colleagues from the Evidence to Practice Office gained valuable insights and built meaningful connections with other organisations at the Evidence and Implementation Summit Conference (EIS) 2023 in Melbourne, Australia. The biennial international event showcases the latest advances in evidence synthesis and translation, evaluation and implementation science. The team shared their experiences and the impact of bringing evidence-based implementation to clinicians in Singapore.



HTAI 2023 ANNUAL MEETING

ACE participated in the HTAi 2023 Annual Meeting held in Adelaide, Australia, in June, which drew more than 700 attendees from 42 countries. Here, our Executive Director Dr Daphne Khoo delivered a plenary presentation titled "Feasibility of Aligning Technology Evaluation Processes and Decision in an Era of Sustainable Development". Separately, our Senior Specialist, Ms Tan Ping-Tee (Consumer Engagement and Education), won the Best Non-Student Poster award for her contribution, "Patient Involvement in Drug Evaluations to Inform Funding Decisions: A Singapore Case Study". Click [here](#) to view the winning conference poster.

Top right: Dr Daphne Khoo, Executive Director, ACE sharing her insights.



ELEVATING MEDICINE

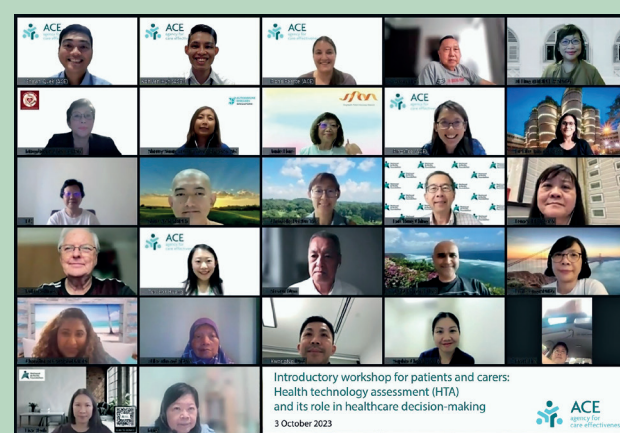
In October 2023, our Chief HTA Officer, Adj A/Prof Ng Kwong Hoe and Assistant Director (HTA) Mr Darren Ng represented ACE at the International Society to Improve the Use of Medicine (ISIUM) Conference 2023 in Chiang Mai, Thailand. The event, which was themed "Improving Use of Medicines: Connecting, Learning, Moving Forward", featured a presentation by Adj A/Prof Ng on how ACE uses health technology assessments (HTAs) to inform the Quality Use of Medicines (QUM) in Singapore.



Chief HTA Officer Adj A/Prof Ng Kwong Hoe delivering his presentation.

EMPOWERING PATIENTS IN HEALTHCARE DECISION-MAKING

Last October, ACE piloted a HTA training workshop for patients and carers with the intent to help them better understand HTA processes, how funding decisions for new drugs and medical technologies are made in Singapore, and how they can contribute to ACE's work and healthcare decision-making.



DRIVING CONTINUOUS IMPROVEMENT

In their continued efforts to boost health outcomes and value in Singapore, our colleagues attended a HTA training workshop that lent insights on best practices in conducting evaluations for medical technologies through the review of clinical evidence and published cost-effectiveness analyses. Held in November, the session was conducted by Professor Kirsten Howard; Associate Professor Sarah Norris; Dr Lukas Staub; Dr Slavica Berber and Mr Blaise Agresta from the University of Sydney, Australia.



ACE NEWS

LATEST TECHNOLOGY GUIDANCES

[ACE's Technology Guidances](#) explain funding recommendations made by MOH's Drug Advisory Committee (DAC) and Medical Technology Advisory Committee (MTAC) for evaluated health technologies. They also include the Committees' rationale for the subsidy funding recommendations and a summary of key clinical and economic evidence that informed their deliberations.



List of ACE's Technology Guidances published in the last 6 months

LATEST CLINICAL GUIDANCES

[ACE Clinical Guidances](#) (ACGs) provide concise, evidence-based recommendations to inform specific areas of clinical practice and serve as a common starting point nationally for clinical decision-making. ACGs are underpinned by a wide array of considerations contextualised to Singapore, based on best available evidence at the time of development. Each ACG is developed in collaboration with a multidisciplinary group of local experts representing relevant specialties and practice settings. ACGs are not exhaustive of the subject matter and do not replace clinical judgement.



List of ACE Clinical Guidances (ACGs)

DID YOU KNOW?
Healthcare professionals can earn 1 CME/CPE point for every ACG read.



Learn more about ACE's latest news, guidance and impact stories on our social media channels. And when you're there, remember to give us a follow.



CONTACT US. If you would like to receive the newsletter directly in your inbox or if you have any feedback for us, drop us a line at ACE_HTA@moh.gov.sg

