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### AT EVERY STEP

Supporting Singaporeans at every stage of their mental wellness journey.



The is no health without mental health."

ASSOCIATE PROFESSOR DANIEL FUNG,  
CHIEF EXECUTIVE OFFICER,  
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Lifewise clinched the following awards at APEX 2023:

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AWARD OF EXCELLENCE Writing - Feature Writing

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# THE POWER OF PREVENTION

## **WE HEAR THE SAYING “PREVENTION IS BETTER THAN CURE” SO OFTEN THAT IT SOMETIMES FALLS ON DEAF EARS.**

But its significance becomes crystal clear when we are the ones playing an active role in maintaining and taking charge of our own health.

Diet, exercise, and regular screening are the cornerstones of preventive care. However, we do not have to navigate these alone. All Singapore Citizens and Permanent Residents are invited to enrol in *Healthier SG*, a nationwide initiative that focuses on preventive care. This movement empowers each of us to take steps towards better health, supported by a family doctor and community partners. Residents living in Central and North Singapore can tap on the NHG Cares programme that connects them to various resources in the community, ensuring a healthier, more fulfilling life. Turn to *Start Your Healthier SG Journey* (page 4) to understand more.

Eating right plays a large part in achieving good health, especially for patients in the hospitals. Our interview with a Tan Tock Seng Hospital chef in *Cooking With Passion* (page 22) unveils his dedication towards crafting meals to nourish patients, and improve their journey to recovery.

As the CEO of the Institute of Mental Health (IMH), Associate Professor Daniel Fung, says, “There is no health without mental health.” Mental health challenges can affect even the physically healthy and those without a prior history of such conditions. Hence, a proactive and preventive approach is necessary. In this vein, IMH offers services tiered to the individual needs of Singapore residents at every stage of their mental wellness journey. Now in its 95<sup>th</sup> year, IMH is moving beyond episodic care to also help those who “feel fine” take charge of their mental health. This shift is outlined in our cover story, *At Every Step* (page 6).

One’s foundational years lay the groundwork for future mental health. With children and youth just as susceptible as adults to anxiety and stress, it is imperative for families to create a healthy home environment. Empowering your child with coping strategies and language to articulate and handle emotions goes a long way. *Brick by Brick* (page 18) explores how parents and guardians can strengthen the psychological resilience of the young ones in their care.

Indeed, our path towards a *Healthier SG* will be marked by our collective commitment to stay well and live well. *Lifewise* wishes everyone a healthier, happier 2024.

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# START YOUR HEALTHIER SG JOURNEY

Since July 2023, the Ministry of Health (MOH) has been sending out invitations via SMS to Singapore Citizens and Permanent Residents to enrol with a General Practitioner (GP) clinic or polyclinic. **BY JOYCE LIM**



## START

### 01 BENEFITS OF SIGNING UP



↘ **Create a personalised Health Plan, 'free-of-charge' with a GP.** The first consultation is **fully subsidised**, covering healthy lifestyle choices, health goals, screenings, and vaccinations.



↘ **Get enhanced subsidies for preventive health.** Existing health benefits and insurance coverage (such as those provided by your employer) can **co-exist** with *Healthier SG*.



↘ **Benefit from fully-subsidised, nationally-recommended screenings and vaccinations.** For Singaporeans only.



↘ **Access healthy lifestyle activities.** Get information on activities, such as exercise classes, held in your community.



↘ **Earn \$20 worth of Healthpoints.** Healthpoints can be used at participating merchants after your first Health Plan consultation.

### 02 CHOOSING YOUR FAMILY DOCTOR

Enrol in *Healthier SG* through the HealthHub app and pick your family doctor from a list of participating clinics. **Opt for a clinic near your home or workplace.** Establishing a long-term relationship with a regular primary care family doctor ensures that he/she is familiar with your medical and personal history. The doctor can then make more accurate diagnoses, detect subtle changes in your health, recommend necessary tests, and refer you to appropriate specialists.



### 03 WHAT YOUR HEALTH PLAN LOOKS LIKE



↘ During the first consultation, you will co-create a **Health Plan** with your family doctor, which could include lifestyle changes to improve your health, plus a review of required health screenings and vaccinations.



↘ You will have a **check-in** with your doctor once a year – or possibly more, if you have a chronic condition that needs to be monitored, such as hypertension or diabetes.



↘ Your health status will be assessed during your subsequent annual check-ins, and your Health Plan will **be updated**.





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## FREE AND SUBSIDISED CARE

➤ **Your annual Health Plan check-ins will be fully subsidised.**

Prevailing subsidies, such as the Community Health Assist Scheme (CHAS), will still apply for visits and treatments. Enhanced *Healthier SG* benefits will apply for residents seeking care from their enrolled clinic.

▶ **DO NOTE:** During your consultation, the clinic may charge you prevailing fees if you seek unrelated medical services or treatment not covered under the Health Plan scope.

➤ **Get fully-subsidised, nationally-recommended vaccinations.** If you meet the requirements for age, gender, vaccination history, and medical conditions.

➤ **Go for free Health Screening under the Screen for Life programme.**

Get screened for cardiovascular risk factors – obesity, diabetes, hypertension, high cholesterol – as well as cervical, colorectal, and breast cancers. Depending on eligibility, you may have to pay \$5 or less.

➤ **Enjoy subsidised rates on specialist care and chronic medications.** Your GP can refer you to public Specialist Outpatient Clinics. From early 2024, CHAS cardholders can purchase whitelisted chronic medications under the *Healthier SG* Chronic Tier at prices comparable to polyclinics.



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## EXTRA PERKS FOR RESIDENTS IN CENTRAL AND NORTH SINGAPORE

When you enrol in a *Healthier SG* clinic, you will be automatically included in the **NHG Cares programme**, run by the National Healthcare Group. Membership is free.



To find out more, scan the QR code to download the NHG Cares app:



for iOS



for Android

06

## SWITCHING TO ANOTHER GP

**Moving to another neighbourhood? Starting a new job at another location?** Or is your chosen doctor not the right fit for you? If your Health Plan discussion has yet to take place, there is no limit to the number of times you can change your primary care provider. If you have already gone through the consultation, you can still switch your primary care provider for up to four times till end-2024. After which, you are only allowed one change of clinic per year.



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## CAN I GO TO ANOTHER CLINIC?

**Yes, regardless of whether you are enrolled into the *Healthier SG* scheme.** You will still be eligible for subsidies under existing schemes such as CHAS and MediSave, but you will not be able to enjoy the *Healthier SG* benefits.



## HOLISTIC CARE APPROACH

### IN BRIEF



- ▶ To boost the population's mental health, IMH has moved upstream towards a preventive care approach.
- ▶ The strategy aligns with NHG's commitment to support *Healthier SG*, which empowers Singaporeans to take charge of their health.
- ▶ Support for varied mental health needs is structured under a Tiered Care model.
- ▶ IMH's community-based initiatives are designed to improve access and facilitate early intervention.

LEFT TO RIGHT ▶  
MS LIM SI HUAN,  
MS NUR KHAIRUNISA  
NGAIMAN,  
MR CUI JIANGLONG

# AT EVERY STEP



PHOTO: KELVIN CHIA; STYLING: SHEH ALKADDRI; HAIR & MAKEUP: MANDY YEO; CLOTHES: ON JIANGLONG: SWEATSHIRT, CHECKED SHIRT AND SWEATPANTS, ALL BY H&M; ON SI HUAN: BOMBER JACKET, BY ZARA; T-SHIRT, BY MANGO; MID-WAIST PANTS, BY H&M; ON NUR: HIGH-WAIST TROUSERS, PLUSH VEST AND STRIPED SHIRT, ALL BY ZARA



From preventive care to recovery, IMH provides the appropriate community support to Singapore residents at every stage of their mental wellness journey.

**F**or months, Brenda\* struggled to cope with unpredictable episodes of panic attacks, and would try to calm herself when symptoms such as accelerated heart rate, dizziness, and breathlessness struck.

The panic attacks affected her ability to perform at work. To make matters worse, her father passed away suddenly when he was overseas. Every semblance of control over her anxiety — which the now 22-year-old had worked so hard for — was lost in an instant. The task of resolving his affairs and bringing his remains back home seemed insurmountable.

At a loss and unable to cope, Brenda sought help from CHAT, a youth mental health assessment service run by the Institute of Mental Health (IMH) for young people aged between 16 and 30.

The intervention provided by CHAT served as an anchor, providing Brenda with a firm base as she started the journey to regain her mental health.

"When CHAT evaluated Brenda, [it was assessed that] her symptoms met the criteria of social anxiety disorder. This seemed to be the reason behind the panic attacks she was experiencing," says Ms Nur Khairunisa Ngaiman, a Senior Case Manager and Team Lead at CHAT.

CHAT referred Brenda for further psychiatric assessment and treatment at a restructured hospital, and continued to provide case management assistance until she found a community service provider, with whom she felt at ease, for counselling and psychological support.

That was in 2019. About 18 months later, Brenda made "significant progress" as a result of seeking help with CHAT. "She expressed deep gratitude to her youth support worker for the assistance rendered in regaining control over her life," says Ms Khairunisa.

## PROACTIVE INTERVENTION

Brenda is among the multitude of Singaporeans who are benefitting from IMH's community-based, preventive approach to improving the population's mental health and well-being. This strategy marks a shift towards preventive work and not just administering episodic care only when illnesses strike. Without early detection and intervention by CHAT, Brenda's untreated symptoms might have manifested into more severe complications over time.

IMH's increasing shift towards preventive care aligns with the Tiered Care Model outlined in the National Mental Health and Well-being Strategy, and serves as a pivotal component of the National Healthcare Group (NHG)'s commitment to support the *Healthier SG* initiative. This national programme by the Ministry of Health (MOH), implemented in July 2023, focuses on preventive healthcare, and seeks to amplify the means by which Singaporeans can take charge of their own health.

The Tiered Care model organises the mental health services according to severity of mental health needs across both health and social care settings, including the community. This allows for a more efficient spread of resources and services to improve care access, avoid unwarranted medicalisation, and reduce stigma. Mental health support is tiered across four levels, ranging from community-led mental health promotion, self-help, and peer support

## ▶ AVENUES OF SUPPORT

The various community programmes by IMH:

- CHAT** ▶ Community Health Assessment Team
- APCATS** ▶ Aged Psychiatry Community Assessment and Treatment Service
- REACH** ▶ Response, Early Intervention and Assessment in Community Mental Health
- EPIP** ▶ Early Psychosis Intervention Programme
- CMHT** ▶ Community Mental Health Team



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## HOLISTIC CARE APPROACH

to the most intensive level of care in hospitals and specialist clinics.

IMH's care approach references this national framework and underpins its Clinical Master Plan. "This plan aims to tackle the escalating mental health requirements of Singapore's population and encompasses a comprehensive approach, from prevention to intensive intervention," says Associate Professor Swapna Verma, Chairman, Medical Board, IMH. The plan outlines four distinct tiers (or 'steps') for addressing the mental health needs of individuals, spanning from those in good health to those at risk or unwell, with either mild-to-moderate or severe symptoms.

"Hospital-based services will continue to focus on tertiary care, particularly for those in Tiers 3 and 4; while community teams like APCATS, CHAT, CMHT, and REACH support individuals that fall under Tiers 2 to 4 in the community," she adds.

"As a person's mental health state is constantly evolving, the level of care they require will change, so they can be transiting from Step 2 to 3, or from Step 4 to 3. Matching them to the appropriate services is necessary to ensure a continuity of care that corresponds with their prevailing needs, and this care can be provided by IMH or in the community," explains A/Prof Verma.

This is also why IMH aims to strengthen rehabilitation services

in the community through collaboration with community services. These include building capabilities among primary care practitioners, para-professionals, teachers, and community groups. To enable community partners, volunteer groups, and healthcare organisations to deliver mental health literacy training for the population, IMH offers relevant curriculum and training.



Seeking help does not have to only happen when one is seriously ill or showing severe symptoms. It could happen at any stage of our lives."

MS NUR KHAIRUNISA NGAIMAN,  
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## THE FOUNDATIONS FOR A HEALTHY MIND

Mental and physical health are inextricably linked, as both are essential components for achieving overall well-being and good health.

As Singapore's only tertiary psychiatric care institution, IMH plays an important role in maintaining the nation's mental health. According to the World Health Organization (WHO), the mental well-being of a country is more than just about the absence of mental disorders within the population. It is, as WHO says, "a state of mental well-being that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community".

The IMH facility serves an average of 1,800 inpatients per day. It also sees about 52,000 patients at its outpatient clinics.

Associate Professor Daniel Fung, Chief Executive Officer at IMH, likens the mental health journey to the *River of Life*, a metaphor depicting a person's life and health during both calm ("upstream") and turbulent ("downstream") times.

"For nearly a century, IMH has been working tirelessly, standing

## THE TIERED CARE MODEL COMPRISES THESE LEVELS:



### TIERS 3 AND 4

Support those with clinically-significant symptoms or diagnosed mental health conditions that require targeted interventions or specialist services.



### TIER 2

Targets individuals who are at an increased risk of developing mental health conditions.



### TIER 1

Targets healthy individuals who are living well and have no mental health conditions.





downstream in the river across a wooden bridge, ready to rescue those who are struggling against the current of mental health illness,” says A/Prof Fung. “Today, our mission of treating illness remains unchanged, but the way we navigate these waters has evolved significantly.”

From a custodial care model when it was established in 1928, IMH has moved towards a community-based approach with the aim of helping patients to “find their way back upstream, recover, and lead more fulfilling lives,” says A/Prof Fung.

Mental health teams in the community adapt their approach to encompass the physical health needs of the population. “The concept of population health — which seeks to improve the health of the entire population — along with the *Healthier SG* effort, centres on fostering a two-way relationship between healthcare providers and the community,” says A/Prof Fung. “This is essential, as there is no health without mental health.”

IMH’s upstream efforts were not instituted overnight. In the last 20 years, it has shored up its community-based programmes, each of which targets different segments of the population with diverse mental health needs. Programmes include services such as APCATS, CHAT, EPIP, and REACH.

IMH has also been training primary care doctors — typically the first point of contact with patients in the community — to better identify and manage milder cases of mental illnesses. “These initiatives not only improve access to mental healthcare



**The concept of population health, along with the *Healthier SG* effort, centres on fostering a two-way relationship between healthcare providers and the community. This is essential, as there is no health without mental health.”**

ASSOCIATE PROFESSOR DANIEL FUNG, CHIEF EXECUTIVE OFFICER, INSTITUTE OF MENTAL HEALTH

services, but also facilitate early intervention and better outcomes,” says A/Prof Fung.

### STEP BY STEP

Here is a detailed look at how IMH’s tiered care model supports Singaporeans through different community programmes.

#### ↳ TIERS 1 & 2 (HEALTHY AND AT RISK) CHAT: Looking out for youths with mental health concerns

Since 2009, CHAT has been assisting young people, between the ages of 16 to 30, who are grappling with mental health concerns. Beyond improving mental health literacy and providing resources, its services also extend to confidential and personalised mental health checks. CHAT ensures that at-risk youths have access to the right support and resources at the earliest opportunity.

There has been a noticeable spike in the stress level of youths in Singapore, with the COVID-19 pandemic exacerbating existing mental health challenges. At the height of the pandemic, there was a surge in referrals to CHAT, as well as interactions through webChat — its anonymous text-based service. webCHAT acts as a discreet support mechanism for youths

who are hesitant about seeking help through in-person consultations.

The user base for webCHAT witnessed a leap, from 181 in 2019 to 460 users in 2021. The number of youths who completed a mental health assessment with CHAT also rose from 838 in 2019 to 1,587 in 2021.

Ms Khairunisa adds that these statistics reveal only a fraction of the prevailing scenario, as numerous youths continue to conceal their mental health worries and fears.

#### EASIER ACCESS TO MENTAL HEALTH CHECKS

CHAT offers support through various channels: in-person at the CHAT Hub at \*SCAPE, over the phone, or through video calls. “The service is confidential and does not require parental consent. It is also available from 12pm to 9pm to accommodate after-school or work schedules,” says Ms Khairunisa.

A mental health check typically takes an hour and involves in-depth questions to determine the young person’s mental well-being. If the youth is found to meet the criteria for a mental health disorder, a youth support worker will, with the individual’s consent, recommend a psychiatric assessment at a restructured hospital. Alternative support services such as counselling are recommended for youths who are reluctant to accept psychiatric referral.

Youths who do not meet the criteria for a mental disorder but exhibit potential risks are advised to pursue counselling to address their concerns and monitor their mental condition. In every scenario, a youth support worker offers support in the interim, while the youths await their first hospital or counselling appointments.

Young people who prefer to remain anonymous can opt for webCHAT, which can be used to carry



Outreach events organised by CHAT staff to raise awareness of its mental health services for youths.

## HOLISTIC CARE APPROACH

out a mental health assessment or provide therapeutic support. Those identified to be at risk are then directed to suitable assistance.

In recent years, CHAT has broadened its scope to include the training of social service agencies, enhancing these organisations' capabilities in assisting youths with mental health needs. Since 2020, the team has trained staff from six agencies to conduct mental health screenings.

### ↘ TIERS 2 & 3 (AT RISK AND UNWELL)

#### APCATS: Bringing mental health services to elderly patients' homes

APCATS supports senior patients with mental health disorders, a quarter of whom have advanced symptoms characterised by moderate to severe behavioural disturbances. These predominantly include psychotic disorders, dementia, and a spectrum of mood and anxiety disorders.

Ms Lim Si Huan, a Senior Clinical Psychologist who manages patients referred to APCATS, says that senior patients under their care are a "unique population" because they also often have mobility issues, are homebound, or are too frail to seek treatment at outpatient services.

"As such, APCATS brings the clinic to them in their places of residence," she says.

Patients are supported by a multidisciplinary team that includes psychiatrists, nurses, and allied health professionals such as occupational therapists, psychologists, and medical social workers. A dedicated nurse is assigned to each senior to streamline home visits and follow-up care.

Besides community referrals, APCATS receives referrals from IMH and other restructured hospitals. Every year, the service sees about 65 new patients who require direct clinical intervention and in total, oversees the care of around 230 patients.

APCATS also supports 85 other seniors in the community through consultancy engagements with community partners. The majority of these patients are above 65, although there are some who are younger and have young-onset dementia.

#### A SEAMLESS TRANSITION BETWEEN TIERS

As part of its Tier 2 work in the Tiered Care model, APCATS provides mental health training and consultancy to eldercare agencies, including active ageing centres,



APCATS offers dementia care training to nursing home staff, combining didactic teaching with hands-on practice sessions, including role play.

day care centres, and nursing homes, as well as the Community Resource, Engagement and Support Team (CREST) and Community Intervention Team (COMIT).

"APCATS serves as a handrail that facilitates a smooth transition between Tier 2 and Tier 3. This is especially important in geriatric care, as the elderly often find it difficult to navigate through multiple care systems," explains Ms Lim. "Being a handrail also means that we can facilitate a transition to Tier 4, should the need arise."

This approach has helped APCATS maintain a stable number of patients under its active care annually. However, the team has observed a troubling trend — there are more patients who are frail and have an increasingly complex range of health issues.

Besides physical illnesses, some patients also face problems pertaining to cognition, relationships, and living conditions. "All these factors may perpetuate or worsen their mental health difficulties," says Ms Lim.

#### SUPPORT FOR COMMUNITY PARTNERS AND CAREGIVERS

In managing such intricate challenges, a team effort from APCATS, community partners, and caregivers is essential.

For example, the clinical frailty project was initiated after APCATS started seeing more frail senior patients. It entails risk screenings for frailty and malnutrition during home visits, with corresponding interventions when required.

Ms Lim shares that APCATS is creating an educational tool for caregivers called Play2Care.



“It’s crucial to shift mindsets towards understanding that recovery is a continual journey, not a finite destination, and active involvement from all stakeholders is crucial.”

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Through interactive games, the mobile application aims to disseminate essential information about the behavioural and psychological symptoms of dementia.

However, the prevalent stigma surrounding mental health treatment poses significant challenges. For many seniors, seeing a doctor or going to the hospital is often associated with severe diseases. "They also perceive the hospital as an extremely inauspicious and embarrassing place to be at," says Ms Lim.

Furthermore, there is a prevailing notion that regards mental health conditions like mood disorders and dementia as an inevitable part of ageing. Some caregivers and community partners also believe that the senior simply needs to be "treated" to get well – a misconception that APCATS wants to correct. "It's crucial to shift mindsets towards understanding that recovery is a continual journey, not a finite destination, and active involvement from all stakeholders is crucial," says Ms Lim.

### ↳ TIERS 3 & 4 (UNWELL) CMHT: Walking the recovery journey with patients

The CMHT operates as a downstream initiative to support individuals exhibiting clinically-significant symptoms, or who have been diagnosed with mental disorders. It focuses on aiding adults between 18 and 65 years in sustaining treatment and fostering recovery within the community. Common severe or persistent mental disorders seen among patients under its care include schizophrenia, delusional disorder, psychosis, major depressive disorder, and bipolar disorder.

Mr Cui Jianglong, Senior Staff Nurse with CMHT, explains that the predominant patients are those who have been discharged from IMH. The team also supports patients from outpatient clinics, as well as those referred by psychiatric units from other hospitals.

These patients, Mr Cui says, often face myriad challenges in their recovery journey. Beyond daily



**The well-being of caregivers is just as crucial as that of the patients. This holistic approach ensures that our patients are not only receiving the care they need, but their families are also fortified and supported in their role."**

MR CUI JIANGLONG,  
SENIOR STAFF NURSE,  
COMMUNITY MENTAL HEALTH TEAM,  
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life and work stress, they must contend with residual symptoms, medication side effects, and the upkeep of medication regimen and follow-up treatments.

To support their recovery after discharge, CMHT coordinates closely with patients or their caregivers to facilitate home visits. During these sessions, CMHT staff assess the patient's condition and home environment, devise care plans, and contemplate further interventions where necessary. These interventions may involve occupational therapists to ensure the maintenance of daily routines, especially for those struggling with other chronic illnesses.

John\*, a 28-year-old diagnosed with schizophrenia, is an IMH patient who has successfully recuperated with CMHT's support. "Even though there were setbacks and challenges, he was able to rebuild his life. He completed his degree at a local university and landed his dream job," shares Mr Cui. "It gives me great satisfaction to see him recover well, find purpose, and achieve his goals in life."

To support the recovery of this group of adults, partnerships with family service centres and social service agencies are vital.



ON: JIANGLONG: SHIRT, JACKET, STRIPED T-SHIRT AND CHINOS, ALL BY H&M

Families and caregivers have a role to play too. "These not only help to monitor patients' compliance to treatment and follow-ups, but also support them in various aspects, such as financial, emotional, and stress management," says Mr Cui.

Acknowledging that many caregivers experience stress and burnout, Mr Cui says that CMHT also provides supportive counselling and advice for long-term care planning. "The well-being of caregivers is just as crucial as that of the patients. This holistic approach ensures our patients are not only receiving the care they need, but that their families are also fortified and supported in their role," he adds. **LV**

### ▶ WHERE TO GET HELP

↳ For those facing a mental health crisis, call IMH's Mental Health Helpline at **6389 2222** (24-hour hotline).

↳ For enquiries about IMH's community-based services:

- Email **CHAT** at [chat@mentalhealth.sg](mailto:chat@mentalhealth.sg), or call **6493 6500/6493 6501**.
- Email **APCATS** at [apcats@imh.com.sg](mailto:apcats@imh.com.sg), or call **6389 2175**.



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# GETTING STRAIGHT ABOUT THE CURVE



Lifestyle adjustments and early intervention can help manage adult degenerative scoliosis to ensure that seniors continue to lead fulfilling lives.

**M**any individuals dismiss back pain and leg discomfort as merely the natural wear and tear of the body due to ageing. Yet, these aches could sometimes manifest as scoliosis, an abnormal twisting and curvature of the spine.

There are several different types of scoliosis, but the one that commonly impacts seniors is adult degenerative scoliosis. Usually underestimated and under-recognised, this condition affects up to 68 per cent of seniors aged over 60, according to international studies. "With an ageing global population, we can expect this number

to rise," says Adjunct Associate Professor Jacob Oh Yoong Leong, Head of Spine Surgery at Tan Tock Seng Hospital (TTSH).

Adult degenerative scoliosis is caused by the deterioration of intervertebral discs, which act as shock absorbers between the small bones (vertebrae) of the spinal canal. When these discs wear down unevenly over time, it can lead to an imbalanced distribution of body weight on the spine, causing it to curve. Age and genetics are the primary risk factors, but spinal injuries, and certain diseases can also contribute to the development of this condition.

Akin to osteoarthritis of the spine, severe cases of adult degenerative scoliosis can lead to intense back pain, particularly when the vertebrae make direct contact with one another. Nerve compression also takes place when the spaces within the spine are narrowed, or when the bulging discs press on the nerve roots nearby, triggering significant leg pain.

Yet, many seniors are unaware of their adult

degenerative scoliosis condition, as it often presents without noticeable symptoms at the start. "They only seek medical attention when they experience considerable pain and find it a challenge to stand upright," says A/Prof Oh.

In his work at TTSH's Orthopaedic Surgery department, A/Prof Oh has observed how scoliosis restricts many once-active patients. "Those with severe scoliosis grapple with pain that prevents them from standing for more than a few minutes and walking short distances, hindering their ability to engage in simple tasks like shopping, cooking, and exercising," says A/Prof Oh. "Over time, this diminished mobility can confine them to their homes. This loss of independence and disruption to social routines can lead to psychological issues, such as depression," he adds.

## **CORRECTING THE BEND**

Adult degenerative scoliosis is often detected during a clinical examination when a doctor assesses a patient's posture from the front or back. In a normal upright stance, individuals without the condition should have their head aligned



UP TO

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**If you find yourself leaning to the side, or if there's a noticeable hump on your back when you lean forward, it could indicate an underlying deformity."**

ADJUNCT ASSOCIATE PROFESSOR JACOB OH  
YOONG LEONG, HEAD OF SPINE SURGERY AT  
TAN TOCK SENG HOSPITAL

prescribe pain relievers, or suggest alternative measures such as physiotherapy, acupuncture, or massage.

#### **OPERATIVE MEASURES**

For patients with extremely severe scoliosis, where daily activities become unmanageable even after different interventions, surgery may be required. This procedure aims to correct the deformity, straighten the back, alleviate pain, and stabilise the condition to prevent further deterioration.

The choice of surgical approach differs, depending on a patient's specific condition and severity of scoliosis. A common procedure is spinal instrumentation and fusion, which involves the insertion of metal rods and screws to enhance spinal alignment.

Fewer than 10 per cent of scoliosis patients require surgery. For those who might need it, doctors meticulously assess the risks and benefits of the

between their shoulders, hips, and legs. "If you find yourself leaning to the side, or if there's a noticeable hump on your back when you lean forward, it could indicate an underlying deformity," says A/Prof Oh.

When doctors observe any of the symptoms (see *Scoliosis Symptoms Checklist*), they typically direct patients to a spine clinic. At TTSH, an X-ray is conducted to assess spinal alignment and confirm a diagnosis. While adult degenerative scoliosis cannot be reversed, an early diagnosis allows patients to take measures to halt or slow its progression.

"It is important to maintain a good posture and refrain from slouching while sitting," advises A/Prof Oh. "Regular stretching and strengthening exercises are also beneficial," he says. A strong core — referring to the muscles around the abdomen, lower back, and pelvis — and spine can reduce the risk of injuries and the likelihood of back pain episodes caused by muscle spasms. Individuals with underlying scoliosis are particularly vulnerable to these issues.

If lifestyle adjustments do not bring adequate relief, doctors might

#### **TYPES OF SCOLIOSIS AND WHO THEY AFFECT**



##### **ADULT DEGENERATIVE SCOLIOSIS**

Affects adults, particularly the elderly. It arises from the asymmetrical degeneration of the discs, joints, and ligaments of the spine.

##### **IDIOPATHIC SCOLIOSIS**

The exact cause is unknown. It is categorised by age of onset: Infantile Idiopathic Scoliosis (0 to 3 years), Juvenile Idiopathic Scoliosis (4 to 9 years), and Adolescent Idiopathic Scoliosis (10 to 18 years)

##### **NEUROMUSCULAR SCOLIOSIS**

Affects individuals with disorders affecting the nerves and muscles, such as cerebral palsy or muscular dystrophy.

##### **CONGENITAL SCOLIOSIS**

Affects newborns, due to a bone abnormality present at birth.

##### **TRAUMATIC SCOLIOSIS**

Affects individuals who have experienced spinal injuries, or surgeries that caused an imbalance in the spine.

##### **IATROGENIC SCOLIOSIS**

Can develop after spinal surgeries or certain medical treatments.

##### **FUNCTIONAL OR NON-STRUCTURAL SCOLIOSIS**

Not due to spinal deformity but rather a result of another issue, such as a difference in leg length or muscle spasms. It can affect any age group.



X-rays showing the spine of a patient before and after a scoliosis surgery.



## GAINING BACK SUPPORT

procedure. "As patients age, surgeries tend to become more complex. Older patients often have diminished physical reserves, making them more susceptible to risks associated with general anaesthesia," explains A/Prof Oh.

Furthermore, older patients often have reduced bone quality, which can affect how well the metal screws and rods provide support, potentially leading to a slower recovery. Complications can also arise if the patient has pre-existing medical conditions like hypertension, coronary heart disease, or diabetes.

A/Prof Oh notes that patients with severe scoliosis, who are deemed suitable for surgery, often experience better outcomes post-surgery compared to if they forego the procedure. This is consistent with many international research studies.

### LIVING WITH SCOLIOSIS

Fortunately, most of A/Prof Oh's patients have mild scoliosis that can be managed well without surgery. He advises such patients to make minor adjustments to their everyday activities. "Be careful when lifting heavy items and avoid excessive bending and twisting, as actions as such could strain a muscle or trigger an arthritic flare-up swelling — particularly if scoliosis is already present."



Additionally, he recommends maintaining an active lifestyle and a healthy diet. Consuming calcium-rich foods like milk helps ward off osteoporosis compression fractures. These small breaks in the spinal bones can, over time, cause the spine to collapse and curve, a scenario often linked with scoliosis.

While scoliosis might not always be debilitating, it is vital for those unaffected to adopt daily preventive measures. These include maintaining proper posture, avoiding prolonged sitting or heavy lifting, engaging in regular exercise to strengthen back and core muscles, and ensuring adequate calcium and vitamin D intake for bone health. "Being proactive about your health is a key defence in preventing complications associated with scoliosis," says A/Prof Oh. **LW**



**Being proactive about your health is a key defence in preventing complications associated with scoliosis."**

ADJUNCT ASSOCIATE PROFESSOR  
JACOB OH YOONG LEONG



### ► SCOLIOSIS SYMPTOMS CHECKLIST

Common signs of adult degenerative scoliosis.

→ **UNEVEN SHOULDERS OR HIPS:** One side of the shoulder or hip may appear higher than the other.

→ **VISIBLE CURVATURE:** A noticeable curve in the spine when viewed from the back.

→ **CHRONIC BACK PAIN:** Nagging or intensifying pain in the mid or lower back.

→ **LEG PAIN OR NUMBNESS:** Due to nerve compression, individuals might experience radiating pain, numbness, or tingling in the legs.

→ **DIFFICULTY STANDING UPRIGHT:** A forward lean or difficulty maintaining a straight posture.

→ **BALANCE ISSUES:** Difficulty in walking straight or maintaining balance, increasing the risk of falls.

→ **VISIBLE HUMP:** A hump on the back, which is especially noticeable when leaning forward.

→ **REDUCED RANGE OF MOTION:** Stiffness or limitation in spinal movement.

→ **FATIGUE:** Feeling tired or fatigued after standing or walking for short periods of time.

→ **BREATHING DIFFICULTIES:** In severe cases, the rib cage might press against the lungs, leading to breathing issues.

Consult a doctor if you notice any of these symptoms, particularly if these are persistent or worsening.

## NAGGING DISCOMFORT

BY JOYCE LIM

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# BEYOND THE HURT

Chronic pain may never go away completely, but proper pain management can offer relief and improve quality of life.

**C**hronic pain can feel like an invisible burden. It impedes everyday tasks, interrupts sleep, and can make basic actions — such as bending down to tie shoelaces or opening a carton of milk — a challenge. Over time, living with chronic pain not only affects physical health, but imposes a burden on one's emotional and social well-being as well. It also increases the risk of mental health conditions like anxiety and depression, and exacerbates other existing chronic diseases.

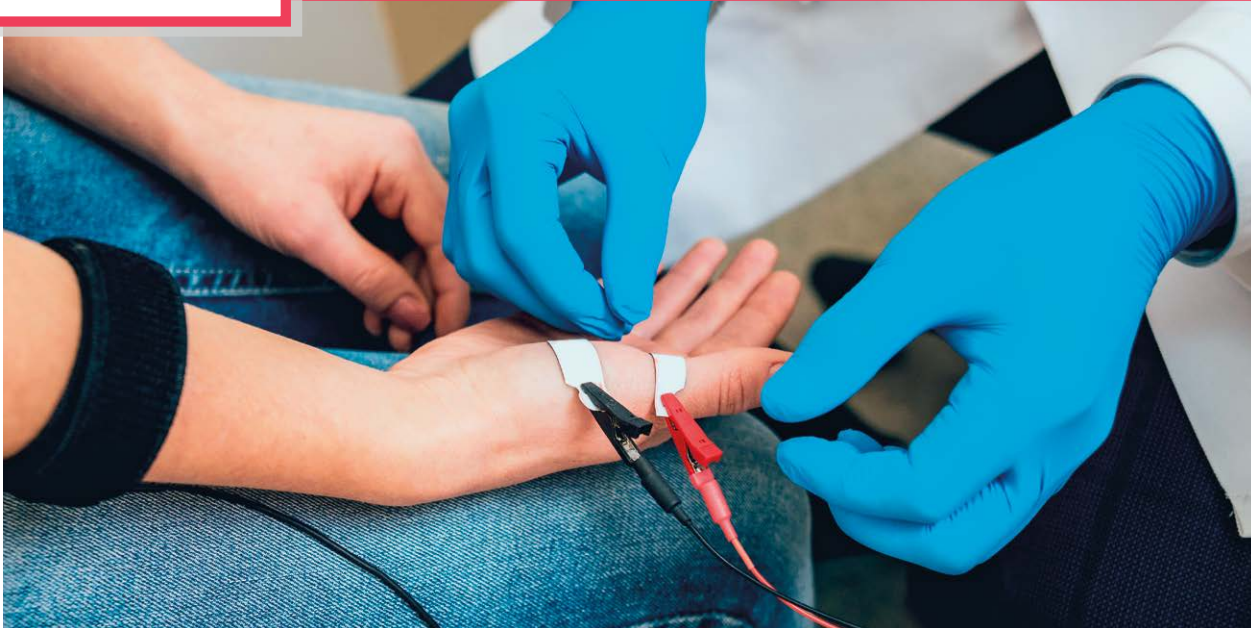
Defined as pain lasting beyond three to six months, chronic pain is multifaceted. "The factors that contribute to chronic pain can be both biological and psychological," says Dr Ashutosh Joshi, Lead Consultant, Pain Service at Khoo Teck Puat Hospital (KTPH)'s Department of Anaesthesia, who treats patients at the hospital's Pain Management Clinic.

These factors change the way the brain processes pain, to feelings of anxiety, depression, or catastrophisation, says Dr Joshi. Catastrophisation is when an individual believes that he/she is in a worse situation than they really are.

Sometimes, the causes of such pain are not immediately apparent. "Nociplastic pain is used to describe this category of pain," explains Dr Joshi. "It is mechanistically distinct from nociceptive pain (caused by ongoing inflammation and damage of tissues) and neuropathic pain (caused by nerve damage)."

To put it simply, people with nociplastic pain may feel pain in areas that have no obvious signs of disease or injury. Symptoms of nociplastic pain include widespread or intense pain beyond the affected area, fatigue, insomnia, and cognitive challenges such as memory and mood issues.

The reasons underlying this condition have not been fully understood, but experts theorise that its origin is linked to pain and sensory processing within the central nervous system — which encompasses the brain and spinal cord. Additionally, there are some medical conditions associated with nociplastic pain, including long COVID and chronic disorders such as fibromyalgia.



However, the challenges do not end there. Some individuals go on to develop chronic pain syndrome, a condition where secondary complications arise, intensifying the level of discomfort.

**Complications under the umbrella of chronic pain syndrome include:**

- > Chronic widespread pain (fibromyalgia)
- > Complex regional pain syndrome
- > Chronic visceral pain (chest pain syndrome, irritable bowel syndrome, abdominal/pelvic pain syndrome)
- > Chronic headache and orofacial pain (tension-type of headache, burning mouth pain)
- > Chronic musculoskeletal pain

**WHY DOES IT HURT SO BAD?**

The root of chronic pain and how it is perceived by each patient is not always clear-cut. Factors such as the patient's mental well-being and level of social support can also affect how his/her level of pain is perceived. "Each patient's response to pain is influenced by a combination of factors," says Dr Bin Wern Hsien, Head and Senior Consultant, Department of Anaesthesia at KTPH. "Doctors should always respect a patient's account of his/her pain, as it could be shaped differently based on individual life experiences."

For some, chronic pain is rooted in psychological factors such as

stress, anxiety, and depression, making it particularly challenging to diagnose and address. "It may take several visits before trust is built between the patient and doctor, and before the patient reveals to the doctor that he or she is depressed," says Dr Bin.

Gathering history from the patient's caregivers is also important, but some may opt to remain silent in the patient's presence. "Such cases require patience — a lot of listening and rapport-building is often needed. Sometimes, even after we diagnose significant underlying psychological stressors and explain our findings, the patient may still not be keen to seek therapy due to social stigma," adds Dr Bin.



**5 TYPES OF CHRONIC PAIN**

**COMMON TYPES OF PAIN TREATED AT THE KTPH PAIN MANAGEMENT CLINIC.**

- > **Joint pain (hip or knee):** osteoarthritis
- > **Lower back pain:** facet arthropathy, sacroiliac joint dysfunction
- > **Radicular pain (upper and lower limbs):** prolapsed intervertebral disc
- > **Neck pain:** facet arthropathy
- > **Myofascial pain (muscle pain)**

**ADDRESSING THE PAIN POINTS**

Depending on where the pain originates, treatments vary. At KTPH's Pain Management Clinic, a comprehensive approach is adopted. "Our goal is to ascertain the nature and location of the pain," says Dr Darryl Heng, Consultant, Department of Anaesthesia, KTPH. "We then devise a combination plan involving pharmacology, procedures, physical therapies, and psychological interventions."

Procedures offered range from nerve blocks, which provide temporary relief, to neurolysis, which intentionally damages certain nerve pathways so that pain signals cannot be transmitted. Medications and complementary therapies like acupuncture may also be incorporated into the treatment plan. Depending on the type of pain and the part of the body it affects, the clinic may refer patients to other departments, such as Sports Medicine, Physiotherapy, Acupuncture, and Psychological Medicine.

For instance, nerve pain — which originates from nerve aggravation or damage — can manifest in various forms, including burning, tingling, pins-and-needles, or a stabbing sensation. Potential treatments include the use of oral drugs, and procedures like nerve blocks and pulsed radiofrequency.



## FIGURING OUT THE CAUSE

THE KTPH PAIN MANAGEMENT CLINIC MAY CONDUCT SOME, OR ALL, OF THESE DIAGNOSTIC TESTS TO IDENTIFY THE SOURCE OF PAIN.



- **Blood tests** for diabetes, rheumatoid arthritis, electrolytes, and more.
- **Electromyography** to assess the function of the muscles and nerves.
- **Nerve conduction study**
- **Imaging scans** such as X-rays, bone scans, ultrasound, CT scans, and MRI.
- **Diagnostic nerve blocks**

Myofascial pain (muscle pain), on the other hand, is often characterised by tightness or soreness due to trauma such as impact or over-stretching, resulting in muscle tears. Treatments usually focus on trigger points and might include needling, physical therapies, or nonsteroidal anti-inflammatory drugs.

"The procedures are generally safe. However, as with any medical procedure, there might be potential side effects," says Dr Heng.

As the causes of pain can be complex, there is no one-size-fits-all therapy. "The approach depends on the patient's preferences, as well as his cultural beliefs and personal experiences," says Dr Heng. "A multimodal treatment approach is best to effect better pain control and outcomes, as well as to minimise the need for high-risk treatments such as opioids," he adds.

### ALTERNATIVE SOLUTIONS

Acupuncture has been gaining traction as an effective complementary therapy. "There's robust evidence supporting acupuncture's efficacy in pain management," says Dr Joshi. All major hospitals in Singapore, including KTPH and Tan Tock Seng Hospital (TTSH), provide acupuncture services. Furthermore, acupuncture for chronic neck and lower back pain at public health institutions is also covered by government subsidies.

However, the effectiveness of over-the-counter supplements to ease chronic pain, such as joint supplements like glucosamine, or nerve supplements like Neuroforte or Vitamin B12, is still debatable. According to Dr Heng, some patients might benefit from consuming these

supplements, while others might not notice any difference. "It's crucial for patients to maintain a pain diary to gauge the supplement's effect," he advises.

Painkillers are safe if the prescribed dosage limit is adhered to. But Dr Bin strongly advises against self-medicating, as some painkillers are unsuitable for certain medical conditions. "Pain physicians may provide a good day/bad day pain regimen for patients with chronic pain, where they recommend a baseline daily analgesic regimen, with additional medications to escalate if the pain is especially bad," he adds. Patients should consult with their doctor if their pain patterns change or intensify. **LW**

### POWER OF THE NEEDLE

#### FREQUENTLY ASKED QUESTIONS ABOUT ACUPUNCTURE

Acupuncture has been used to treat various chronic conditions, such as neck and shoulder pain, non-specific lower back pain, fibromyalgia-related pain, and myofascial pain.

The concept of *qi* (energy), meridians (energy pathways), and acupuncture points in Traditional Chinese Medicine is backed by biophysics research. "The stimulation of acupuncture points, especially with needles, can cause changes in biochemical substances in areas of the brain related to perception of pain or sensation," says Dr Quah Teik Joo, Head of Service, Complementary Integrative Medicine, and Senior Consultant, Department of General Medicine, TTSH.

- **What to do before and after acupuncture?** Do not engage in acupuncture on an empty stomach, when feeling fatigued, when menstruating, or after vigorous exercise. Avoid consuming alcohol on the same day before and after acupuncture, and do not taking a shower within two hours after a session.
- **How deep do the needles go?** The depth is measured in cun (寸); the closest equivalent in English is "inch". At acupoints near the fingers, the needle goes just 0.1 cun under the skin, whereas acupoints on the buttocks can go as deep as 3 cun.



- **Does it hurt?** You may feel a slight pricking sensation. The sensation of de qi, when the needle hits the acupoint, is variably described as a feeling of being electrocuted, or a sense of fullness, gripping or numbness. Acupuncturists may intensify the de qi for better effect.
- **Will there be blood?** Some bleeding may be involved, but even so, it would just be a few drops of blood. Some bruising may occur at the spot where the needle enters the skin. If you are on anticoagulant medications, the acupuncturist may recommend laser acupuncture instead.
- **5. Would the patient experience immediate results?** An acupuncture session typically lasts 20 to 30 minutes. You may experience some pain relief after the first session, but the benefits are usually only apparent after three to five sessions.

**D**epression, anxiety, and loneliness are common mental health symptoms that afflict about a third of adolescents in Singapore aged between 10 and 18. This finding from a local survey inevitably triggers the question: Can children and youth truly experience anxiety and stress at their young age?

The answer is “yes”, they can. “Children can get stressed about things that matter to them,” says Ms Desiree Wee, a Senior Clinical Psychologist at the Institute of Mental Health (IMH). Younger children may worry about their studies and family relationships, while older ones may grapple with peer perceptions, as friendships play a crucial role in the formation of their self-identity. Mental well-being can also be affected when children encounter or witness abuse and neglect at home.

Poor mental health can disrupt a child’s healthy development, potentially leading to lasting effects that persist into adulthood. Conversely, children with good mental health can build healthy relationships, maintain a positive self-image, and display resilience when confronted with challenges. These abilities are essential for navigating life’s trials. “Children who thrive are those who feel they have non-judgmental support at home, regardless of the difficulties they encounter,” says Ms Wee.

Yet, as the survey findings showed, only one in 10 parents was able to spot “clinical-level” mental health symptoms in their children. This suggests that adults need to do more to support their children’s mental well-being.

As the holiday season approaches, families with children will have

## Establishing a strong parent-child bond is essential for open communication.



BY EVELINE GAN

IN CONSULTATION WITH  
MS DESIREE WEE  
SENIOR CLINICAL PSYCHOLOGIST  
// INSTITUTE OF MENTAL HEALTH



# BRICK BY BRICK

The foundation of good mental health begins at home.



more time and opportunities to foster discussions about mental health and establish healthy habits at home. Ms Wee offers some suggestions:

### CREATE A NON-JUDGMENTAL SPACE

In moments of distress, it is common for children to cry or have tantrums. Ms Wee emphasises that this behaviour is due to the fact that children are still learning how to manage “big emotions”, and may lack the right vocabulary or experience to express themselves adequately. “Such moments are valuable opportunities for teaching children to embrace emotions as a natural part of life, and develop their social-emotional skills,” she explains.

When your child expresses his/her feelings and thoughts, refrain from immediately passing judgement, or giving advice. Ms Wee suggests showing genuine interest in hearing them out: “While we don’t have to agree with their thoughts, we can empathise with their feelings.”

She also advises against labelling the child as “bad” or “naughty”. Additionally, if you say

something you later regret, apologise when things have simmered down. This is a good way to show that even adults make mistakes, and that this is part-and-parcel of learning from experience. This would also teach the child what makes a good apology.

### WALK YOUR TALK

Children learn stress-handling behaviours from those around them. Hence, parents and caregivers should be mindful of their conduct during challenging moments. “Maintain your composure when feeling stressed or frustrated in your child’s presence,” says Ms Wee. “When you begin to feel agitated, verbalise the steps you plan to take to regain your calm. For instance, explain to the child, “I notice my voice is getting louder. I’m feeling frustrated. Your emotions matter to me, so I’m going to take a moment to have a cold drink and return when I’m ready.”

While this may feel unnatural at first, Ms Wee explains that talking aloud in this manner helps the child to recognise his/her own distress, and to learn how to think and act in such situations. “If you have to step away to calm down, before leaving, let your child know you



health issues among youth. A recent study published in the *Journal of Behavioural Addictions* found that children who spent the most time on digital devices were more likely to exhibit higher levels of internalising problems, such as social anxiety and depression, two years later.

While platforms like online games and social media can offer emotional solace to some, Ms Wee warns that screen time can become a concern when it interferes with daily life, or triggers withdrawal behaviours. A few signs to watch for include the child not having offline friendships, not completing homework, or becoming aggressive when screen time is restricted.

Establish healthy screen time habits at home. Implement regular breaks, set screen time limits, and ensure the completion of homework and chores before indulging in screens. Simultaneously, encourage alternative recreational activities such as music, drawing, reading, or sports, suggests Ms Wee.

### BREAK DOWN THE STIGMA

Parents might question whether discussing mental health with their children is necessary. However, open conversations can diminish the stigma surrounding such issues, fostering improved comprehension and empathy. It also helps children navigate their emotions and effectively cope with distress.

Consider sharing trustworthy resources with your children. However, exercise caution as not all online materials are suitable. "Some social media accounts and chat groups promote unhealthy coping mechanisms such as self-harm and food restrictions, or reinforce messages of despair and hopelessness," cautions Ms Wee. "Look for resources that educate and destigmatise mental health, promote recovery tips, and evoke feelings of hope," she adds. The content should also be age-appropriate and align with your family values.

Recommended resources include the *BUZZ* magazine by Singapore Children's Society's Tinkle Friend and IMH's social media platforms.

need a moment to compose yourself and will be back soon. Otherwise, your child might assume that you've abandoned them, causing more distress," she says.

### FOSTER OPEN COMMUNICATION

Establishing a strong parent-child bond is essential for open communication. Do this by showing interest in what the child likes and checking in when he/she encounters difficulties.

In times of stress, such as marital discord or when a loved one is unwell, Ms Wee suggests being transparent about the situation. "Use simple language your child can comprehend and avoid figurative expressions," she says. "Assure them it's not their fault. Where possible, stick to routines."

To bolster the child's sense of empowerment, involve him/her in activities within his/her control. For instance, if a family member is unwell, ask if he/she would like to make a card, sing a song, or engage in a video call with the loved one.

### ENCOURAGE BALANCED SCREEN USAGE

Research has shown a link between excessive screen time use and mental

## NAVIGATING MENTAL WELLNESS

### CHILDREN WHO REQUIRE MORE HELP CAN TURN TO:

► **HELPLINES:** Tinkle Friend (1800-2744-788; [www.tinklefriend.sg](http://www.tinklefriend.sg)) can support children who are distressed, lonely, have suicidal thoughts, or practise self-harm. Other helplines can be found at [www.imh.com.sg](http://www.imh.com.sg). As these provide time-limited support, children should be connected to longer-term care by their loved ones, school, or social agencies.

► **SCHOOLS:** Teacher-counsellors and in-house school counsellors can provide some socio-emotional support. They may refer at-risk children to social service agencies or REACH (Response, Early Intervention and Assessment in Community mental Health) for specialised help. The REACH programme by IMH includes multidisciplinary teams that work with schools, as well as government and social agencies, to provide children with mental health support.



Explore [betterinternet.sg](http://betterinternet.sg) by the Media Literacy Council to learn more about online safety for children.

### DO NOT BE AFRAID TO SEEK HELP

It is normal for both children and adults to experience a spectrum of emotions. However, professional support may be needed if the child exhibits specific signs. This may include consistent crying and throwing of tantrums to the point where it affects the child's life at home, school, and playtime.

Other red flags include sudden or sustained declines in academic performance, consistent aversion to attending school, chronic difficulty in forming positive relationships with other kids, and frequent complaints of physical discomfort or dizziness.

To foster a nurturing environment, consistency in actions is key. "Begin with small steps," says Ms Wee. This might involve simply listening to your child without judgment during dinner, or setting aside time for shared activities, including a short walk or reading a book. **LW**



THE  
FUTURE  
IS NOW

BY TINA WANG



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# BALANCING TECHNOLOGY WITH HEART



In today's digital age, with many embracing the conveniences of 5G (fifth-generation mobile network) and the advancements of AI (Artificial Intelligence), a quiet transformation is unfolding in Singapore's

healthcare sector. Tan Tock Seng Hospital (TTSH) is among a number of institutions harnessing the latest medical technology (MedTech) to improve patient care.

Ward 5C may appear similar to other wards in TTSH. It is a General Medicine ward that serves a diverse mix of patients, from those with complex medical conditions to those facing discharge-related challenges, such as lack of caregiver support at home and suitability of their living environment for recovery. However, its designation as a 'Smart Ward' entails much more than a label. Within this space, traditional care routines are seamlessly integrated with advanced technology, such as fall-preventing smart beds, delivery robots, and predictive sensors.

Ms Lim Meiling, Lead of TTSH's Smart Ward and Senior Nurse Manager (Unit), points out that the Smart Ward goes beyond the

## The Smart Ward at Tan Tock Seng Hospital offers a glimpse of better efficiencies and outcomes for tomorrow's patients.

PHOTOS COURTESY OF TAN TOCK SENG HOSPITAL AND MOON TECHNOLOGIES

application of new devices. Instead, it is about fundamentally refining how healthcare is delivered. "We're seeing enhanced communication, smarter resource utilisation, and a holistic shift in patient care," she explains.

Furthermore, the initiative focuses on reinventing standard operations. By automating tasks and harnessing real-time data, the ward minimises errors and ensures a consistent quality of care. This gives the TTSH staff freed more time and space to engage directly with patients.

### A PERSONALISED APPROACH

The TTSH Smart Ward was officially launched in February 2023 in response to challenges posed by an ageing population, increasing complexity of care needs, and a constrained workforce in the healthcare sector. Dr Keefe Tan, Co-Lead of TTSH's Smart Ward and Associate Consultant of General Medicine, says that the onset of the COVID-19 pandemic further underscored the urgency

to refine healthcare procedures for enhanced efficiency.

At the heart of the TTSH Smart Ward evolution is its multidisciplinary team made up entirely by staff on the ground. Led by Ms Lim, it includes doctors, nurses, allied health professionals, and administrators, who work closely with colleagues across various departments, as well as other stakeholders. "Our collective mission is to lead the transformation of inpatient care by embracing technology and innovation, while maintaining a strong focus on improving both patients and the work environment for healthcare professionals," says Ms Lim.

### PREPARING FOR TOMORROW'S NEEDS

The TTSH Smart Ward is a pioneering step for swift, real-world testing of healthcare innovations. Smart Ward Leads are granted the autonomy to choose and champion the projects and trials they believe will best

Delivery robots have reduced meal service time from 60 to 35 minutes per ward, allowing nurses to prioritise patient care over laborious tasks.





benefit patient care. “The Smart Ward serves as a practical testing ground for new ideas and processes, with the intent to scale these advancements to other wards and, if appropriate, the entire hospital,” says Dr Tan. Such expansion not only elevates patient care, but also fine-tunes the hospital’s resource allocation, boosts operational efficiency, and improves healthcare outcomes across the board.

As MedTech evolves, so must the training approaches that support it. Ms Lim anticipates a shift in training methods – from static, one-time sessions to dynamic, ongoing learning journeys. This transformation would keep pace with technological advancements, ensuring staff are always equipped with the latest tools and knowledge to provide quality care.

Envisioned future training methods include immersive simulations through virtual and augmented reality to bolster practical skills. Adaptive learning platforms could also offer customised training tailored to individual needs, allowing for a more personalised approach to professional development.

While MedTech plays a pivotal role in healthcare transformation, maintaining the human touch in patient care is equally crucial. Training ensures that, even with the influx of new tools, the heart of healthcare remains ever-present.

### CHARTING A NEW PATH

Smart Wards are not unique to TTSH. They are also found in other local hospitals, and each is

contributing to the way healthcare is delivered in Singapore.

Thus far, the TTSH Smart Ward has trialled 20 innovations, with 14 initiatives already introduced and in line to be scaled up to other wards. Twenty other initiatives are slated for testing in the coming year, including the introduction of a “virtual nurse”. A virtual nurse is a remote healthcare provider



that leverages technology, such as video conferencing, to provide non-physical care support, enhancing the efforts of the bedside care team. Technology is ever-changing, and there is always something new to learn for MedTech practitioners. It also translates to myriad opportunities for personal and professional growth. “Healthcare innovation has a global reach. Collaborations between healthcare institutions, technology giants, and research groups create innovative and exciting collaborations. This is appealing for those who want to contribute beyond their local community,” says Ms Lim. “The possibilities that lie ahead in medical innovation are boundless.” **LW**

The Just Walk Out (JWO) store system uses smart weight sensors to track item consumption, automate restocking, and generate reports for streamlined inventory management.

## ENHANCING PATIENT CARE: A LOOK AT FOUR SCENARIOS

Ms Lim Meiling, Senior Nurse Manager (Unit) and Smart Ward Lead at TTSH, provides insights into how patients experience innovative care within Smart Wards.

### ► Real-time monitoring for immediate intervention

**Scenario:** Patients who require close monitoring are equipped with smart monitoring devices that continuously track vital signs, such as heart rate and oxygen levels.

**Benefit:** Any deviation from the norm triggers instant alerts to the medical staff. This timely notice allows for immediate response, potentially averting further complications.

### ► Predictive analytics in fall prevention

**Scenario:** By using predictive analytics and smart sensors, the movement patterns of elderly patients are analysed to gauge the risk of falls.

**Benefit:** By identifying irregular movements that suggest a high risk of falls, staff can pre-emptively intervene by adjusting the patient’s positioning or offering assistance, thereby minimising potential injuries.

### ► Efficient remote consultations

**Scenario:** Clinicians collaborate with care teams for real-time patient assessments via a secure, hands-free wearable video platform.

**Benefit:** This not only reduces unnecessary hospital visits, but also ensures that patients receive timely treatment and consistent medical guidance, while maintaining quality in delivery of care.

### ► Personalised patient education

**Scenario:** Patients with chronic conditions can access a bedside smart device containing tailored information about their illness and treatment plan.

**Benefit:** By empowering patients with a deeper understanding of their health, they are better equipped to manage their conditions, and this could potentially lead to improved health outcomes.



# Mr Chiang Kek Heung

TAN TOCK SENG HOSPITAL  
FOOD & BEVERAGE SERVICES

## JOYFUL INSPIRATION

Mr Chiang's passion for cooking was sparked by his desire to bring comfort and delight to people through food. "I am a firm believer that food can bring forth happiness, as well as connect people," says the 48-year-old. "I cook at home too, and my wife and our three children — aged three, 16 and 18 — love it when I whip up their favourite dishes, such as Japanese egg tofu, or lotus root, peanuts and pork rib soup."

### "I HAVE BEEN WORKING AT THE TTSH KITCHEN FOR 12 YEARS.

> Prior to that, I was a chef at a Chinese restaurant. I joined the hospital because I have always had a thirst for different challenges and wanted to make a positive impact through my work.

### I ALWAYS COOK FROM AND WITH MY HEART.

> While it is important to me that the food we prepare is both delicious and wholesome to our patients, the most rewarding aspect of working in a hospital kitchen is witnessing our patients eat well, recover, and be discharged.

### MANY PEOPLE HAVE A MISCONCEPTION THAT HOSPITAL FOOD IS BLAND AND BORING.

> While we have to comply with certain dietary restrictions, the team strives to make meals nutritious and palatable by using fresh ingredients, including herbs and spices, to enhance and create the *umami* flavour.

### ENSURING MEALS ARE BOTH NUTRITIOUS AND ENJOYABLE FOR A DIVERSE GROUP OF PATIENTS CAN BE A DAUNTING TASK.

> We encounter a range of dietary requirements daily. These

MEET YOUR  
HOSPITAL  
CHEF

# COOKING WITH PASSION

Chef Chiang Kek Heung takes us behind the scenes of Tan Tock Seng Hospital (TTSH)'s central kitchen, where tasty meals are specially crafted to nourish patients. BY KEENAN PEREIRA PHOTOS COURTESY OF TAN TOCK SENG HOSPITAL



include allergies, intolerances, and other special or personal preferences. Hence, meal preparation requires careful planning and creative culinary solutions to accommodate these unique needs, without compromising on taste and quality.

### IT CAN BE EQUALLY CHALLENGING TO FIND A BALANCE BETWEEN TASTE, TEXTURE, AND THERAPEUTIC NEEDS.

> For example, patients on a renal diet have to control their intake of sodium, which can make it difficult



## ▼ CULINARY COMFORTS

THESE ARE SOME OF THE FESTIVE DISHES THAT HAVE BEEN SERVED TO PATIENTS AT TTSH:

- ✓ **Eight Treasure Rice**
- ✓ **Sauteed Golden Prawn**
- ✓ **Vegetable Dumpling Soup**



*The food image is for illustrative purposes only and may not reflect the exact dish served at TTSH.*

to create flavourful dishes. In such cases, we partner a dietitian who works with us to customise recipes for patients. It is a collaborative effort that seeks to combine taste and nutritional value for patients.

### THE HOSPITAL MENUS ARE REFRESHED EVERY TWO YEARS.

> This is done under the supervision of our in-house menu team, which includes nutritionists, speech therapists, nurses, and food service staff. However, some all-time favourites, like ginger sauce chicken and sweet and sour fish, are always available. We serve three cuisines at TTSH: Chinese, Malay, and Western. Each has a dedicated vegetarian option. The menus are also different during festive seasons: we serve celebratory treats during Chinese New Year, Hari Raya Puasa, Deepavali, and Christmas. These specials are typically planned several months ahead.



### THE HOSPITAL KITCHEN IS A BUSY PLACE.

> Our operations team comprises some 120 staff with many different skillsets. Together, we plan, prepare, and cook around 4,500 meals every day. As we serve breakfast, lunch, and dinner, the team works in shifts. Each shift is about nine hours long.

### MY TYPICAL WORK DAY STARTS WITH SAFETY INSPECTIONS AND EQUIPMENT CHECKS.

> I then evaluate the patient count and the specific dietary needs to prepare for the cooking required. Once the meals are ready, I oversee the distribution and delivery throughout the day.

### THE KITCHEN TEAM'S JOB DOES NOT END WITH COOKING.

> We are also responsible for plating and delivering the meals to patients. From food preparation to plating and serving, an average meal takes about three hours to produce. Our chefs will perform a taste test after every dish is prepared, and before the plating process.



### ONE OF MY ALL-TIME FAVOURITE RECIPES IS MINCED MEAT TOFU.

> It is a cherished family heirloom, passed down from my late-grandmother. Watching her prepare this dish skilfully left a lasting impression on me, which I still remember to this very day. I also enjoy preparing braised pork belly with yam and kam heong (golden fragrance) prawn during festive occasions. My entire family loves these dishes. " LW

## FLAVOUR UP BY GOING LOW ON SODIUM

Sauces can elevate a dish's taste, especially for patients who may find meals bland. However, many come with high sodium content. These simple swaps can make for a healthier meal:

#### AVOID IF YOU CAN

- ▼ Fish sauce
- ▼ Oyster sauce
- ▼ Chili sauce

#### RECOMMENDED

- ▼ For a slightly lower-in-sodium dipping sauce, try light soy sauce with chopped chilli padi and a squeeze of lime.
- ▼ Season your stir-fries with spices like ginger, garlic, and peppercorns.
- ▼ Consider dipping into paprika or garlic powder, as they are also lower in calories.



# PLAYING A BIGGER ROLE IN PREVENTIVE HEALTH

BY TINA WANG  
IN CONSULTATION WITH  
ASSOCIATE PROFESSOR FAITH CHIA  
// DESIGNATED INSTITUTIONAL OFFICIAL //  
NATIONAL HEALTHCARE GROUP RESIDENCY

**R**esidents — or junior doctors undergoing graduate medical training — play an important role in the health of the community. However, their efforts should not be limited to transactional encounters where a disease or condition is being treated in a medical setting. Instead, Residents should see patients as they are — as people, each with their own lives, away from the hospital or clinic — and have a clear overview of the holistic medical care required by those they treat.

This is the social ethos the National Healthcare Group (NHG) aims to reinforce through its annual NHG Residency Community Engagement Day (CED).

## BEHIND THE SOCIAL ETHOS

Community engagement is an important part of the residency training curriculum and NHG Resident Council work plan. Started in 2015, the inaugural CED featured some 125 Residents visiting various community homes and a senior activity centre under the Asian Women's Welfare (AWWA) over two weekends. They spent time with 350 senior citizens in more than 200 flats in Geylang, Ang Mo Kio, and Thomson. Since then, CED has been part of the institution-level orientation for all new Residents to NHG Residency.

The CED organising teams have since partnered with organisations, such as the Community Chest, Dover Park Hospice, and Tsao Foundation, enabling social interactions between Residents and different groups of beneficiaries, including patients, senior citizens, and migrant workers.

While beneficiary groups would generally be communities that doctors regularly encounter through their clinical work, groups are selected in discussion with the Designated Institutional Official (DIO), Associate Professor Faith Chia.

Embracing empathy for patients under their care is part and parcel of the training for doctors at the National Healthcare Group.

Following the CED events, Residents are encouraged to reflect on their takeaways. "This helps them consider what they have learnt from the interactions with the community, and how CED would change their perspectives — both personally and professionally — moving forward," says Associate Professor Nicholas Chew, the DIO who initiated the first CED in 2015.

It is hoped that extended interactions between the Residents and the community outside clinical settings would lead the young doctors to develop an appreciation of the home and social environment the patients are part of. "We encourage the Residents to understand the patients'

routines, lifestyle, and everyday life, which may offer insight into their social situation and difficulties, not just their medical conditions," says A/Prof Chia.

## PLAYING A PART IN POPULATION HEALTH

In the wider scheme of things, Residents are also training to support *Healthier SG*, the national initiative by the Ministry of Health (MOH) designed to promote patient-centred preventive care. As part of a support ecosystem, *Healthier SG* encourages Singaporeans to build a trusted, lifelong relationship with their family doctor. He or she would work with them to develop a personalised health plan, and be the





best partner to provide care and help shape health goals, including nationally-recommended health screenings and vaccinations.

Community engagement is a cornerstone of *Healthier SG*, and a platform where young doctors can build on their CED experiences. "This is so that, subsequently, the Residents' understanding about the needs of different segments of society can grow, and they can be better positioned to understand health-seeking behaviour and the role community partners play in population care," says A/Prof Chia.

### MAKING THE DIFFERENCE

In-person CED activities resumed in 2023. Held in July at ACE The Place Community Centre in collaboration with North West Community Development Council, New Life Community Services, and Woodlands Health (WH), it involved about 100 seniors and over 120 Residents, programme directors, and administrators.

The half-day event saw the junior doctors participating in art, games, and singing sessions with the seniors. Residents also had a meal with the elderly folk. "The activities were organised to encourage physical, mental, and social health," says Dr Muhammad Faisal Bin Johandi, Senior Resident (NHG Geriatric Residency Programme), who spearheaded 2023's CED. "Our WH colleagues also shared healthy living tips with the seniors."

At the event, A/Prof Chia urged Residents to continue fostering their



interest in the community-at-large. "The future is to have health within the community. That's where our patients are — they have stories, they have hopes, and they have obstacles behind them. It would be really good to have this sort of relationship with our patients," she explained. "And this is the perfect opportunity for us to do that."

For Dr Faisal, being a member of the organising committee offered him the chance to go the extra mile. "Sometimes in our busy work, we (doctors) forget that the person we are caring for is actually somebody with a story, a family, and his or her own anxieties," he says.

In his address to new Residents at the July 2023 event, Dr Faisal said "With this CED, I wanted to bring this reality to you, especially at the start of your training. I hope that you will also learn something about yourself — that you can be a better person, better clinician, and better member of society."

Beyond CED, Dr Faisal also developed a programme for Malay seniors, where activities are geared towards not just physical, mental, and spiritual health, but also interests. To that end, weekly Zumba classes, mental wellness talks, and healthy cooking classes have been put together in the hope that such engagement will help the seniors modify their lifestyles.

The efforts of Dr Faisal and others have created a ripple effect within NHG — a number of Residents have also taken their own initiative to create community engagement activities. For example, Orthopaedic Surgery Residents have arranged a visit to the Willing Hearts soup kitchen, launched a blood donation drive, and raised funds for children's charity organisation Make-a-Wish Singapore. Meanwhile, Psychiatry Residents have planned excursions to the Asian Civilisations Museum for long-stay patients of the Institute of Mental Health (IMH), and to River Wonders for students of the



autism-focused Pathlight School. Family Medicine Residents have co-organised the Migrant Worker Health Carnival with migrant worker-related organisations network My Brother SG.

These are positive signs that CED's mission is being fulfilled as part of NHG's commitment to give back to the community. As A/Prof Chia surmises, "At NHG Education, we believe that we are responsible for improving the health of our patients and communities through the education of our workforce, healthcare partners, patients, and caregivers." **LW**



### NHG RESIDENTS ON COMMUNITY ENGAGEMENT DAY

▶ "It was an eye-opening experience to interact with the elderly and to see them out of the hospital and in a better environment."

Dr Kenneth Ngoh, Resident (NHG Rehabilitation Medicine Residency Programme)

▶ "I was heartened by the carefree attitude of some of the seniors. To be able to maintain that at such an old age is truly inspiring."

Dr Natasha Tang, Resident (NHG Family Medicine Residency Programme)







WORKOUT



ROY LIM

**60-YEAR-OLD  
RETIREE AND TRIATHLETE,  
PARTICIPATED IN  
FIVE TRIATHLONS**



# GOING THE DISTANCE

BY CHERYL TAY MAIN PHOTO AIK CHEN

## Taking part in an Ironman triathlon at 60 might seem like a pipe dream, but for Roy Lim, it was just the beginning.

For decades, Mr Roy Lim led a hectic work life where social drinking and late nights were the norm. A C-suite executive who was also a smoker, regular exercise was never on his radar.

However, after Mr Lim retired in 2020, a series of events conspired to lead the then-57-year-old to a new purpose in life — competing in triathlons. Thanks to a complete lifestyle transformation, Mr Lim is the healthiest and fittest he has ever been.

### What was life like before you embraced healthy living?

I smoked at least 20 cigarettes a day, drank frequently and heavily, and was not mindful of what I ate. I did not exercise either. In my late teens, I played competitive squash, but I stopped being active once I started my career. I was the guy who would wait 10 minutes in the car just to get the parking lot nearest to the lift, because I did not want to walk the distance.

### What prompted the lifestyle shift?

I had left my corporate job at the end of 2018 to create an insurtech start-up (aimed at creating a tech solution that changes how traditional insurance is provided). However, my lifestyle was still anything but healthy. It was the COVID-19 pandemic that changed my life.

The day before the Circuit Breaker (CB) started, I had a big birthday celebration. I woke up with congested lungs and a major headache. At that moment, I decided to quit smoking for good. That was not the first time I had tried giving up though — there had been at least four attempts over the years.

I went full cold turkey and the first two weeks were tough. However, the withdrawal symptoms became less severe and easier to deal with.

During that period, I also could not socialise, since pubs were closed and safe distancing measures were in force. However, I do not usually consume alcohol at home, so my alcohol intake decreased drastically.



## Age is just a number, and it is never too late to start. Look at me, a grandfather pursuing a young man's sport!"

MR ROY LIM, 60, RETIREE AND TRIATHLETE

### How did you get into triathlons?

To maintain my sanity during the lockdown, I started walking my dogs more frequently. At the park, there were many people jogging, and that inspired me to put on my running shoes and do the same. The first time I ran, I managed only one kilometre (km). Someone even stopped to ask if I was all right, as I was bent over and panting heavily.

I then set a target of completing five km in 30 minutes. I trained and achieved it, but I knew I would not be motivated to continue working out if I just kept to running. I started searching for a bigger goal to work towards.

I came across a video of an Ironman triathlon (3.9km swim, 180km bike ride, and 42.2km run), and after some research, I decided to take part in one.

An individual like me – with no fitness background – would take a long time to prepare for such a mammoth task, but I was determined to put in the hard work. By the time the lockdown restrictions eased, I was fully retired and could commit to the sport. I learnt how to swim, invested in a triathlon bike, and started on triathlon-specific training.

### How challenging was it to start a new and strenuous sport at your age?

When I first started to train, my ego got the better of me; I was pushing very hard all the time. I suffered a meniscus tear (also known as a torn cartilage in the knee) in 2021, which required surgery and a long recovery process. It took about nine months before I could start running again.

In September 2022, I completed my first triathlon – an Olympic distance race at the TriFactor Triathlon in Singapore. Two months later, I did my first Ironman 70.3 race in Melbourne – a half-Ironman race consisting of a 1.9km swim, 90km bike ride, and 21.1km run. In 2023, I ran 60km at the park for my 60<sup>th</sup> birthday in April, completed the Ironman 70.3 Desaru in May, and the PTO Asian Open in Singapore in August. My biggest race was in October – the Ironman California, a race that I had been working towards the last few years!

### What other changes did you make to your lifestyle?

Besides exercising, I prioritise nutrition and mental well-being. I have adopted a flexitarian diet, which emphasises plant-based foods with meat and other animal products consumed in moderation. I have also cut down on sugar, and am consuming more whole foods.

Additionally, I sleep early. I'm in bed by 10pm, and wake up at 5am or 7am to train, depending on the regimen for the day. I allow myself alcohol once a week as a form of reward.

### GETTING STARTED



Tips from Mr Roy Lim for those interested in pursuing a challenging sport like triathlon:

➤ **TAKE BABY STEPS.** You will naturally be excited in trying something new, but you might end up pushing your body beyond its limits, leading to potential injuries.

➤ **LISTEN TO YOUR BODY.** Many training plans online are generic and not age-specific. You need to learn to listen to your body, and adjust the training to suit your needs.

➤ **FORGO YOUR EGO.** After a certain age, there are things that others can achieve that you cannot. Constantly remind yourself that you are only competing against yourself, and to not bother about what the rest are doing.

➤ **STRIKE A BALANCE.** You cannot dedicate your waking hours to just training. For me, I also spend my time studying the stock market and options for personal investment. Doing so keeps me mentally alert, and prevents me from getting jaded from the sport.

➤ **TRAIN THE MIND TOO.** If you train daily, your body will become stronger and faster, but it is the mind that is more challenging to train. You need to be disciplined. If you know that you need to get up early for training the next morning, go to bed early and cut down on your screentime.

### Any advice for seniors who want to lead a healthy lifestyle but are not motivated enough?

Age is just a number, and it is never too late to start. Look at me, a grandfather pursuing a young man's sport! The objective of my journey is to improve my health, stay physically functional, and be in it for the long haul. My wife, daughter, and son were surprised to witness my change and are very supportive. A few of my friends have also been inspired to make changes to their lifestyles – though none as dramatic as mine! **LW**



Mr Roy Lim engaging in the various disciplines of a triathlon. (Photos: Roy Lim)

# INNOVATING WELLNESS

**Harnessing the right smart home technologies can improve quality of life.**

BY MORGAN AWYONG

Digitalisation impacts all aspects of life, including the way we shape our health priorities. The *Smart Home Healthcare Market 2023* report anticipates robust growth in wellness technology, projected at 27.3 per cent over six years. Expected to lead this surge is the Asia Pacific region, including Singapore with its strong data connectivity, burgeoning high-income households, and ageing population.

If you are looking for ways to optimise technology vis-a-vis your health, here are some wellness gadgets to consider.

## ▶ VOICE-ACTIVATED VIRTUAL ASSISTANT

Virtual assistants, such as Amazon's Alexa, Apple's Siri, and Google Assistant are popular for their adaptability and ease of use, be it network-connected or as standalone devices. Besides weather updates and appointment reminders, they also serve a far more critical purpose – saving lives.



**BESIDES WEATHER UPDATES AND APPOINTMENT REMINDERS, VIRTUAL ASSISTANTS SERVE A FAR MORE CRITICAL PURPOSE – SAVING LIVES.**

LIFESPACES



The *BBC* recently reported how a heart patient, Emma Anderson, programmed her Alexa device to automatically contact her mother upon hearing "Alexa, call for help!". Anderson's six-year-old daughter, Darcey, quickly adopted this simple command, and used the voice-activation feature on two occasions when Ms Anderson was unwell – once even summoning an ambulance.

Some newer devices, like the latest edition of Echo Dot, which connects to Alexa, integrate temperature and motion sensors that turn on the lights when a person enters a room. Such devices can also send an alert when a room gets overly warm – a potential fire hazard.

## ▶ ROBOT CLEANERS

The living environment plays a significant role in our mental well-being. A messy living space can trigger stress, fuel anxiety, make focusing a struggle, and strain relationships. In contrast, a clean and tidy home boosts feelings

of happiness, increases productivity, and sharpens our concentration.

Daily cleaning requires consistent effort, and this is where robot cleaners step in. These portable gadgets are useful for routine cleaning, effectively battling dust and dust mites.

Newer models include functions such as mopping, making them handy cleaning machines.

## ▶ MOTION SENSORS

Motion sensors offer invaluable support for the elderly. Such sensors eliminate the need for fumbling with switches in the dark, and ensure that spaces are well-lit. These devices can also open doors and windows, turn on a faucet and even flush a toilet – making mundane daily tasks less of a physical burden to frail seniors.

Additionally, such sensors can serve as remote caregivers, for example, sending an alert to a caregiver if a senior sleepwalks or wanders beyond their usual routes. These devices also detect trends, including prolonged inactivity.







### ► AIR FRYER

Noted as a healthier alternative to deep frying, air frying employs convection heat instead of oil, yet still manages to preserve the crispy texture of food.

Air frying trims the calorie intake of fried food by around 70 to 80 per cent. Laboratory tests by CNA's current affairs programme, *Talking Point*, showed that air-fried chicken wings had 38 per cent less saturated fats than the deep-fried version, while the air-fried *selar kuning* — also known as yellowstripe scad — and French fries had about 53 per cent less. Furthermore, the air-fried chicken wings also contained 55 per cent less trans-fat, and 25 per cent less cholesterol.

### ► SMART PILL DISPENSER

The process of taking medication might seem straightforward, but a local study found that 60 per cent of adults with chronic conditions do not adhere to their prescribed medications.

Enter smart pill dispensers. From audio and visual alerts present in the device to smartphone notifications, these reminders ensure that individuals stay on track with their intake of supplements and medications.

For the forgetful seniors and busy individuals, a pre-organised medication regimen eliminates the



▲  
**A smart desk can help users switch effortlessly between sitting and standing positions, therefore promoting better posture.**

risk of taking incorrect doses — a potentially life-threatening error.

Additionally, these gadgets come with the capability to forecast medication refill requirements, which is vital for those with chronic conditions.

### ► SMART DESK

In an era of hybrid work models and remote work setups, a height-adjustable desk can be a significant investment in well-being.

Prolonged sedentary periods can lead to back and neck pain, raised blood pressure, increased high blood sugar, and unhealthy cholesterol levels. Research also indicates that sitting for more than eight hours daily without physical activity can lead to mortality risks comparable to those of smokers, as well as the morbidly obese.

A smart desk can switch effortlessly between sitting and standing positions with a press of a single button. New models enable timer programming for automatic height adjustments, ensuring that the user's posture is optimal, especially during intense work sessions.

### ► AIR PURIFIER

From removing haze particles, dust, and allergens, air purifiers are now prevalent in many homes. Some research shows that air purifiers may benefit people with asthma and those suffering from allergies. However, not all devices work the same.

As pollutants differ in size, experts recommend opting for an air purifier equipped with a HEPA filter that can capture over 99.5 per cent of particles measuring three microns or less. This includes bacteria, dirt, dust, moisture, pollen, and viruses. Do bear in mind that air purifiers are less effective against gaseous pollutants, such as paint fumes.

Modern smart purifiers are equipped with built-in air-quality sensors, initiating filtration when levels are unhealthy. These can also be programmed to work at specific times, for example, an hour before an asthmatic family member returns home. **LW**



EXPERTS RECOMMEND CHOOSING AN AIR PURIFIER EQUIPPED WITH A HEPA FILTER THAT CAN CAPTURE OVER

**99.5%**

OF PARTICLES MEASURING THREE MICRONS OR LESS.

EAT  
WELL

# HAPPY MEALS



**Uplift your mind  
and mood through  
flavourful choices.**



## MOOD-BOOSTING MEAL IDEAS



**1**  
Waldorf salad (leafy greens, apple, walnuts)

**2**  
Wholemeal French toast with egg

**3**  
Baked sweet potatoes topped with guacamole

**4**  
Salmon *teriyaki* on brown rice

**5**  
Chickpea curry (chickpeas, tomatoes, turmeric)

**6**  
*Tom kha gai* (lean chicken meat, coconut milk)

**7**  
Minestrone soup (wholemeal pasta, carrot, beans, vegetables)

**8**  
Brown rice *bibimbap* (whole grain, carrot, vegetables, egg)

These recipes can be found online.

BY MORGAN AWYONG

Ever experienced a mood boost from a bowl of ice-cream? This pleasure is not fleeting. Research indicates that foods rich in mood-enhancing ingredients significantly nourish our brain and its neurotransmitters — key chemicals that regulate our emotions. Neurotransmitters such as serotonin, dopamine, oxytocin, and endorphins heighten feelings of happiness. When our diet sustains these chemical messengers, our overall mood improves.

Thus, if you are beaming post-lunch, it could well be due to the wholegrain salmon sandwich you had. Here is the scoop:

### > Veggies for vitality

Think of vegetables as nature's mood-boosters. Bursting with nutrition and light on calories, they are a delicious way to send antioxidants to our brains. Vegetables that contain

vitamins C and E, as well as beta-carotene — which converts to vitamin A in the body — guard our brain cells against oxidative stress, a damaging process accelerated by ageing and an unhealthy diet. Over time, this can lead to cognitive decline and mood disorders.

For a mood-boosting meal, fill your plate with vegetables such as carrots, kale, spinach, and sweet potatoes. These are abundant in essential vitamins and brain-fortifying compounds like flavonoids and polyphenols.

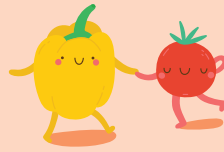
Additionally, vegetables are a rich source of minerals. These include zinc, which is crucial for neurotransmitter functions and regulating our stress responses; and magnesium, which aids nerve transmission and muscle relaxation. With iron in the mix, you are also better girded against fatigue.





VEGETABLES ARE A RICH SOURCE OF TRACE MINERALS ESSENTIAL FOR

# EMOTIONAL BALANCE



## > Feel good with every fruity bite

Fruits, often enjoyed post-meal or as juices and smoothies, are more than tasty treats – they are mood-boosters. Oranges, for example, are packed with vitamins C and B, protecting the brain and enhancing neurotransmitter production. Just having a glass of orange juice can help set a positive tone for your day.

If you find yourself feeling peckish, grab a banana. It not only contains vitamin B, but its balance of sugar and fibre stabilises mood. It is also a source of tryptophan, which our body converts into mood-enhancing serotonin and sleep-aiding melatonin.

## > Go “healthy” on the fats

There is more to the esteemed Mediterranean and Japanese diets than tradition. Their reputations largely hinge on the abundant omega-3 fatty acids found in fatty fish like sardines, anchovies, salmon, and mackerel. Omega-3 fatty acids are “healthy fats” noted for bolstering brain health.

Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) are the two omega-3 fatty acids found in fish and other seafood. They are essential for brain cell membrane regeneration, and also combat brain inflammation, which are linked to mood disorders like depression.

## > Nutrients for neurotransmitters

Vitamin B is important not only because it has many functions in our body, but also because it greatly affects the health of our neurotransmitters. When levels of certain B vitamins are not balanced, it can lead to conditions like depression, dementia, and cognitive decline.

Among the different B vitamins, B7 (biotin) and B9 (folate) are particularly noteworthy. Biotin is integral for enabling communication between cells, and helps in the production of serotonin and dopamine – neurotransmitters responsible for making us feel good. Commonly found in egg yolks and whole grains, adding biotin to our diet can be as simple as enjoying an egg sandwich.

Meanwhile, folate is key for neurotransmitter functions and overall mental well-being. It is also an important player in how our body responds to stress. You can get folate from a variety of foods like leafy greens, legumes, papayas, asparagus, and avocados.

## > Stabilise with lower GI choices

When we consume sugars, they turn into glucose – the primary fuel for cells in our body. The brain, dense with nerve cells, is particularly voracious, using up to half of all the energy we get from sugar. Because the brain relies so much on glucose, a sudden

increase or decrease in glucose levels can upset the balance of brain chemicals, leading to mood swings.

To achieve steady energy release, choose foods with stable glucose content. Whole grains such as quinoa, brown rice, whole wheat bread, and oats release glucose slowly, due to their lower glycaemic index (GI). Leafy greens and lean proteins like poultry provide essential nutrients and fibre without causing significant spikes in blood sugar. Including “healthy fats” from avocados, nuts, and olive oil not only enrich flavour, but also slow digestion, further helping to maintain glucose levels.

## > Hydrate for mood balance

The amount of fluid you consume does impact your mood. Even a slight dehydration can alter the brain’s functions, affecting memory, decision-making, and focus. This can result in heightened stress and mood imbalances.

When not adequately hydrated, the body triggers the stress hormones, like cortisol. It can also disrupt sleep, leading to longer-term mood and emotional issues. Moreover, dehydration can cause headaches, fatigue, and reduced energy levels, further impacting our emotional state.

Bear in mind that the benefits of a nutrient-rich diet can only be fully unlocked when you are well-hydrated, as fluids promote digestion and nutrient absorption. Besides water, include fresh greens and hydrating fruits like grapes, oranges, peaches, and watermelon to maintain balance. **LW**

## WATCH YOUR PLATE

### > Avoid foods that trigger inflammation.

Inflammation is a natural response of our bodies during the healing process. However, when it persists without any specific injury or infection, it is termed chronic inflammation.

Beyond physical symptoms, inflammation can profoundly affect our emotions, causing exhaustion, irritability, and melancholy. Our dietary choices can exacerbate

or alleviate this condition. Studies have shown that some foods can trigger neuroinflammation, specifically impacting the brain. This not only disrupts the function of brain regions governing emotions, but also prompts the release of proinflammatory molecules known as cytokines. High concentrations of these cytokines are associated with mood-

related conditions like depression.

The upside? We can identify and avoid inflammation-triggering foods. These typically include processed foods, excessively-sugared treats and beverages, refined grains, and items fried in trans fats.

Cutting down these foods can be challenging initially, but even small

shifts can bring about significant benefits. Consider replacing a couple of fast-food meals with healthier alternatives weekly, or gradually reduce your consumption of processed snacks.

As your mood elevates and stabilises, you will find that the decision to avoid these foods is worthwhile.







SKIN HEALTH

# GLOWING ALL THE WAY

Late nights ahead this festive season? Here's how to stay skin-healthy.



## POWER-PACKED

Berries contain antioxidants and vitamin C, while nuts are rich in vitamin E and healthy fat.



BY KAREN TEE

As the largest organ in our body, the skin plays a pivotal role in safeguarding our overall well-being. Adults carry about 3.6 kilogrammes and approximately two square metres of skin that acts as a protective barrier against environmental pollutants and germs. Skin also functions as a sensory tool for touch, regulates our temperature, and expels toxins.

Thus, having healthy glowing skin is not just about looks; its overall state mirrors our general health and vitality.

## EAT WELL FOR SKIN HEALTH

A balanced diet is the basic building block of healthy skin. As the holiday season approaches, many of us are looking forward to enjoying festive treats, but it would be wise to exercise restraint when doing so. Opt for antioxidant-, mineral-, and vitamin-rich foods to support cell regeneration and enhance skin elasticity.

Berries of all varieties contain antioxidants and vitamin C, while nuts like almonds, pecans, and walnuts are packed with

vitamin E and healthy fat. Turkey, a holiday staple, is rich in vitamin B complex, which improves the skin's barrier function, and zinc, a mineral essential for collagen production.

Greens such as spinach and kale contain vitamins A, C, and K, vital for cell repair and overall skin health. When choosing sides, swap regular fries for sweet potato versions; these are loaded with beta-carotene and vitamin C, which are beneficial for collagen production and inflammation control.

## STAY HYDRATED FOR SUPPLE SKIN

Proper hydration is key to maintaining your skin's radiance; adequate water intake helps expel toxins and facilitates skin cell renewal.

While enjoying the festivities, be mindful of the diuretic effects of alcohol that lead to potential dehydration. Similarly, excessive sugar consumption contributes to crepey skin (thin, wrinkled, and similar in appearance to crepe paper). Elevated blood sugar levels degrade collagen and elastin — protein fibres vital for the skin's firmness and elasticity. Additionally, high sugar intake triggers inflammation and oxidative stress, further accelerating the skin ageing process.

## EMBRACE QUALITY SLEEP

Amid a packed schedule, aim for seven to nine hours of restful sleep each night — or sneak in a power nap during the day — to maintain your skin's radiance and vitality. Quality sleep plays a pivotal role in the body's repair and rejuvenation processes, including the regeneration of skin cells.



To combat skin dryness, balance each alcoholic beverage with a glass of water, and go easy on sweet treats.

## ADD EXTRA STEPS TO YOUR REGULAR SKINCARE ROUTINE

Dolling up for a party? Begin by cleansing, toning, and moisturising, before using a face primer to lock in the skincare and smoothen the skin. "This guards against patchy and heavy-looking make-up," says says make-up artist and beauty educator Mr Larry Yeo. "Proper skin preparation also ensures your skin stays supple," he adds.

Before sleep, always cleanse your face thoroughly to remove all traces of make-up and impurities that may clog your skin.

## SAFEGUARD YOUR SKIN FROM THE ENVIRONMENT

Planning a getaway? Whether you are heading for a winter retreat or a tropical escape, it is essential to protect your skin from the elements to preserve its health.

In colder destinations, shield skin from harsh winds and dry air with scarves and gloves. Use a richer moisturiser to keep the skin well-hydrated.

In warmer climates, where humidity is high, opt for a mild cleanser and oil-free moisturiser to prevent potential breakouts. Most importantly, always apply a broad-spectrum sunscreen with at least SPF30 to guard against harmful ultraviolet rays — even in places that do not seem sunny.

## UNWIND TO RELIEF STRESS

Stress can disrupt skin balance, giving rise to breakouts, sensitivity, and accelerated ageing.

When the body is stressed, it releases cortisol and other hormones that compromise the skin's protective barrier, increasing its vulnerability to irritants. Stress can also cause blood vessels to dilate, resulting in redness and inflammation of the skin. Moreover, inflammation worsened by stress can amplify conditions, such as acne, eczema, and psoriasis.

Reduce stress levels with calming activities, such as meditation, deep breathing, or taking a long, slow walk. Alternatively, treat yourself to a relaxing massage to relieve the knots and aches. Prioritising self-care is important in sustaining your skin's radiance beyond the year-end festivities. **LW**



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# SPOTLIGHT

## ▶ A HEARTFELT APPRECIATION FOR OUR 'CAPTAINS OF CARE'

Here's how the various National Healthcare Group institutions celebrated Nurses' Day.



### > INSTITUTE OF MENTAL HEALTH (IMH)

Mdm Rahayu Mahzam, Senior Parliamentary Secretary, Ministry of Health and Ministry of Law, joined IMH in honouring its nurses. The celebration included song and dance performances, a tribute video, a showcase of hydroponics and garden crafts, and a buffet. Mdm Rahayu also presented

awards to 19 nurses and nursing teams for their outstanding patient care and clinical practices.



### > NATIONAL CENTRE FOR INFECTIOUS DISEASES (NCID)

NCID Senior Leaders went on a walkabout to commemorate both Nurses' Day and Patient Service Associates' (PSAs) Day, and to appreciate the Long Service Award recipients. Snack packs were also distributed to the Nurses and PSAs.



### > NATIONAL SKIN CENTRE (NSC)

NSC celebrated its first Nurses' Day with its Senior Management at the new NSC building. Highlights included the Nurses' Merit Awards Ceremony and the NHG Nursing Olympics 2023, where participants from various NHG institutions competed in challenges that tested their clinical nursing knowledge and skills.



### > NATIONAL HEALTHCARE GROUP POLYCLINICS (NHGP)

NHGP Senior Management hosted its first post-COVID-19 centralised event for its nurses. The fun-filled weekend carnival featured game booths, a prize wheel, a lucky draw, and sumptuous food.







**> YISHUN HEALTH**

In the lead-up to Nurses' Day, special guest Mr Louis Ng, Member of Parliament, Nee Soon GRC, along with the Senior Management and department heads from Yishun Health, assumed the role of Nurse Buddies to experience life as a nurse. A charity walk, benefitting MINDS – a service agency for individuals with intellectual disabilities – was also organised. Additionally, Senior Management, Nursing Leaders, and the organising committee made rounds in the hospital to personally express gratitude to the nurses. The celebration culminated



in a food bazaar, a concert, as well as a snack distribution session for those working the night shift.



**> WOODLANDS HEALTH (WH)**

Over 600 nurses celebrated Nurses' Day at the Orchid Country Club. The fun-filled event included a dance performance by the WH Nursing Leaders. Senior Management members also put on aprons to serve dinner to the nurses.

**> TAN TOCK SENG HOSPITAL (TTSH)**

After three challenging years of battling the pandemic, TTSH resumed in-person Nurses' Day celebrations to uplift its nursing staff. Day 1 featured award presentations and stage performances, including a "TTSH Got Talent" contest. Day 2 saw a carnival with numerous fun-filled activities. Nurses were also served lunch by Senior Management – a notable tradition to appreciate the nurses.







## ► TOWARDS A HEALTHIER POPULATION

SHBC 2023 underscored the need for healthcare collaboration with community and social care partners to promote healthy living among residents.

Organised by the National Healthcare Group (NHG), the 21<sup>st</sup> Singapore Health & Biomedical Congress (SHBC) 2023 focused on the importance of reshaping the healthcare ecosystem to improve overall population health. It also explored how healthcare providers can team up with partners beyond healthcare to enable healthier communities.

Held on 12 and 13 October at Max Atria @ Singapore Expo, Second Minister for Health Mr Masagos Zulkifli graced the event as Guest of Honour at the opening ceremony. "We need to leverage expertise from healthcare institutions and combine it with the community knowledge of organisations on the ground to deliver effective interventions," said Minister Masagos in his keynote address to more than 1,800 delegates.

Through four symposiums and 16 tracks, distinguished local and overseas experts shared their in-depth expertise and knowledge on four key areas: Future of Health;



Health Behaviour & Change; Health & Technology; and Digital Health, AI and Big Data.

### INNOVATIVE HEALTHCARE SOLUTIONS ON DISPLAY

SHBC also showcased various NHG innovations, many of which were co-developed with academic and industry partners. They included a shoe for patients with diabetic foot; foods for people who have difficulty swallowing; personal care products for people with eczema; 3D-printed prostheses and surgical guides; and point-of-care diagnostics for chronic diseases, to name a few.

### PUTTING CARE IN RESIDENTS' HANDS

In line with *Healthier SG*, NHG is taking further steps to bring about better health to the community it serves. Professor Philip Choo, Group



CEO, NHG, took the opportunity during the event to highlight the NHG Cares movement, which empowers residents with tools, knowledge, services, and resources to take charge of their health.

One of the panel discussions also emphasised the importance of encouraging people to adopt and sustain positive health behaviours to improve population health.



## ▶ TACKLING THE FUTURE OF HEALTHCARE

CHI INNOVATE 2023 embraced digital innovations and strengthened the capabilities for health and social care.

**T**he Centre for Healthcare Innovation (CHI) is committed to transforming healthcare.

At its CHI INNOVATE conference on 28 July 2023, two initiatives aimed at improving the abilities to care for residents in the community, beyond patients in hospitals, were launched.

The first, the CHI Health and Social Change Academy (HSC Academy), enables social and healthcare agencies to develop critical skills for building and sustaining Communities of Care through its specially-curated curriculum. A sandbox, the Digital CoC Playground, has also been set



*Mr Ong Ye Kung, Minister for Health (first row, 3<sup>rd</sup> from the left), Professor Philip Choo, Group Chief Executive Officer, NHG (first row, 4<sup>th</sup> from the left), Professor Eugene Fidelis Soh, Deputy Group Chief Executive Officer (Integrated Care), NHG & Chief Executive Officer, TTSH & Central Health (first row, 2<sup>nd</sup> from the left), and Associate Professor Tan Cher Heng, Executive Director, Centre for Healthcare Innovation (first row, 1<sup>st</sup> from the left) at the CHI INNOVATE 2023 conference.*

up to facilitate collaborations on digital solutions that will more easily engage and activate residents to adopt healthy behaviours.

The other initiative, the CHI Evaluation Framework (CHIEF), mitigates risk and adopts a holistic evaluation of innovations seeking real-world deployment. The framework recommends best-practice methods to optimise design of trials, ensure reliable results, and provide cost-benefit analysis.

## > HONOURING INNOVATIVE PROJECTS

CHI INNOVATE 2023 also recognised the winners of the National Healthcare Innovation and Productivity Awards for their impact on healthcare and health workforce challenges. Among the award recipients were Tan Tock Seng Hospital (Excellence Champion Medal and Best Practice Medal – Care Redesign) and National Healthcare Group (Best Practice Medal – Care Redesign).

## ▶ AT THE FOREFRONT

The latest innovations in rehabilitation technology were showcased at RehabWeek 2023.

**R**ehabWeek 2023, a global conference on cutting-edge rehabilitative technology, made its Asian debut in Singapore on 24 to 28 September 2023. Organised by the National Healthcare Group (NHG), International Consortium of Rehabilitation Technology (ICRT), and Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, it attracted some 1,000 local and international visitors, including medical experts, engineers, and entrepreneurs. Deputy Prime Minister and Coordinating Minister for Economic Policies, Mr Heng Swee Keat, was the Guest of Honour for the Opening Ceremony of RehabWeek 2023.

RehabWeek 2023 featured a wide range of industry-driven activities, including an exhibition, investor forum, scientific programmes, global workshops, keynote lectures, and laboratory visits to institutions such as the Rehabilitation Research Institute of Singapore and Tan Tock Seng Hospital (TTSH)'s Clinic for Advanced Rehabilitation Therapeutics.

Various technologies were on show, including the Rehabilitation Digital Hub for tele-rehab services, the H-Man arm rehabilitation robot, and the Mobile



*Guest of Honour, Deputy Prime Minister Mr Heng Swee Keat, touring the exhibition at RehabWeek 2023.*



*Prof Philip Choo, Group CEO, NHG, delivering his welcome speech at the Opening Ceremony.*

Robotic Balance Assistant that assists users in activities such as walking and exercise.

At the event, Professor Philip Choo, Group CEO of NHG, highlighted NHG's commitment to excellence in Rehabilitation Medicine. He said, "Rehab medicine is one of our key clinical and research focus areas, especially with Singapore's ageing population and increasing longevity. NHG is actively working on making care more accessible and closer to home to our patients. We are reinventing the way we deliver care through our NHG Cares movement – building established and trusted relationships with our residents, community, and social partners as the Regional Health Manager for the Central and North Singapore."





## ▶ JOINING HANDS FOR MENTAL HEALTH

SMHC highlighted the importance of collaboration in nurturing the well-being of Singaporeans.

The aim of the seventh Singapore Mental Health Conference (SMHC), held on 4 and 5 October 2023, was to foster a supportive mental health ecosystem where seeking help is encouraged, quality mental health services are accessible, and empathic support is available.

Conducted in a hybrid format, the conference was opened by Guest of Honour, Mr Ong Ye Kung, Minister for Health. Six plenary sessions and 40 presentations were organised for the approximately 800 attendees, and these included professionals from the government, healthcare, social, and education sectors, as well as patients and caregivers. Topics for discussion spanned youth mental health, workplace well-being, peer support, digital tools in mental healthcare, and the mental well-being of the elderly.



Mr Alvin Tan, Minister of State for the Ministry of Culture, Community and Youth, kicking off the conference with a plenary on fostering mental resilience in communities.

### ENGAGING YOUTHS THROUGH VISUAL STORYTELLING

The Institute of Mental Health released a graphic novel for its 95<sup>th</sup> anniversary. Written by mental health professionals, *Polderstein 13: School of the Amazing Brain* introduces mindfulness as a tool to build resilience and deal with adversity in a complex and changing world. Purchase a copy at <https://bit.ly/P13Brain>. It is also available in major bookstores and online stores.



From left: IMH co-authors senior medical social worker Liew Shiang Hui, senior clinical psychologist Germaine Tan, and Chief Executive Officer A/Prof Daniel Fung.

## ▶ HUB FOR HEALTHCARE INNOVATION

The city's first biomedtech incubator has opened at Novena.

Singapore's growing biomedical technology (biomedtech) innovation ecosystem, which has expanded nearly sixfold in the past decade, has been further boosted by the recent opening of co11ab Novena (co11ab) at the Lee Kong Chian School of Medicine Novena campus.

Co-established by the National Healthcare Group (NHG), Nanyang Technological University, Singapore (NTU Singapore), and Agency for Science, Technology and Research (A\*STAR), the facility is Singapore's first



biomedtech incubator. Officially unveiled on 22 August 2023, it aims to support start-ups and bridge the gap between groundbreaking research and successful commercial ventures.



Guest of Honour Dr Janil Puthucherry, Senior Minister of State for Health, touring the co11ab facility.

To-date, seven start-ups have benefited from co11ab. These include:

RNAscence Biotech by NTU Singapore and the National Skin Centre, which developed a skin patch that reduces the appearance of scars.

Occutrack by A\*STAR, NHG, and Trendlines Medical Singapore, in collaboration with NHG Eye Institute, which developed an eye movement tracking system for managing visual deterioration.

## HONOURING A PIONEER

TTSH's infectious diseases specialist awarded the National Outstanding Clinician Mentor Award at NMEA 2023.



Mr Ong Ye Kung, Minister for Health (top row, 4<sup>th</sup> from the right), Dr Janil Puthucherry, Senior Minister of State, Ministry of Health (top row, 5<sup>th</sup> from the right), Mdm Rahayu Mahzam, Senior Parliamentary Secretary, Ministry of Health (top row, 3<sup>rd</sup> from the right), and A/Prof Brenda Ang (first row, 5<sup>th</sup> from the right) with the awardees of NMEA 2023.

Associate Professor Brenda Ang, the Clinical Director of Infection Prevention and Control, and Emeritus Consultant of Infectious Diseases at Tan Tock Seng Hospital (TTSH), was one of six individuals and a team that were recognised at the National Medical Excellence Awards (NMEA) on 31 August 2023.

Presented by the Minister for Health, Mr Ong Ye Kung, the awards acknowledged the efforts of healthcare professionals in advancing healthcare,

improving the standards of patient safety, and driving research and education.

### A ROLE MODEL

Well-known as a pioneer of infectious diseases prevention, Prof Ang has dedicated three decades to enhancing healthcare safety and quality standards. She has been pivotal in formulating health

surveillance criteria and preventive guidelines, as well as providing a solid defence against infectious diseases, including the Nipah virus, SARS, and COVID-19.

Prof Ang's dedication extends to academia, where she shares her knowledge with medical schools and healthcare institutions, inspiring peers and the next generations of physicians.

## SHARING FOR AWARENESS

NSC's Eczema Day Public Forum deepened participants' understanding of eczema.



Professor Tan Suat Hoon, Director of NSC, kicking off the Centre's first in-person Public Forum since the COVID-19 pandemic.

World Atopic Eczema Day is observed on 14 September every year to raise awareness on the skin condition, and to garner support for those affected by it. On 2 September 2023, the National Skin Centre (NSC) marked the occasion by holding an Eczema Day Public Forum in the same month, bringing some 240 attendees to the Lee Kong Chian School of Medicine Novena campus.

During the sharing sessions, doctors presented their insights and expertise on eczema care, in both

English and Mandarin. They delved into the symptoms, causes, effective control methods, and allergies, as well as how eczema affects mental health.

Ms Serene Ng, an early childhood educator and participant, expressed her gratitude after attending the talks, saying, "I've gained beneficial knowledge about using creams and moisturisers to assist my pre-school students with severe eczema."

Another attendee, Timothy Lee, a university student who has battled eczema since childhood, found

guidance in the content: "The talks enhanced my understanding of how I can exercise without triggering any eczema flare-ups."



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