

GP BUZZ

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HEALTHY RECIPE

THE GIFT OF HEALTH

We Will Hold You ARTiculate! & The Giving Season



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"SMART" KNEE REPLACEMENTS - TURNING PAINFUL YEARS INTO GOLDEN YEARS

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OCTOBER - DECEMBER 2016

About the Cover Page:

We Will Hold You ARTiculate! & The Giving Season



ARTiculate! is a pilot acrylic painting programme initiated by the Medical Social Workers (MSWs) of Tan Tock Seng Hospital. It provides an avenue of self-expression to enhance patients' psychosocial well-being. (See article Page 1)



This is the Season for Giving, and Senior Nurse Rizza Fernandez engages volunteers from the Yours Today Choir (Top, Nurse Manager Sarisahbi and her team Yi Ping, Rizza, Tadeja and Sharifah from TTSH Buffer Stepdown Unit (BSU) Wards with choir leaders Mr Anthony Lim and Ms Mary de Souza and members), as they encourage patients in longer-staying wards who await placement in suitable nursing homes. TTSH is blessed with over 900 volunteers who selflessly give their time and talent for our patients' well-being and healing. Our close collaborations with Nursing Homes in central region of Singapore under Project Care, Community Rehabilitation, and other care initiatives also form a vital part of the post-hospitalisation support system. **GPBUZZ**

ARTiculate!

ARTiculate! first began when a group of Medical Social Workers (MSWs) from Tan Tock Seng Hospital (TTSH) started an acrylic painting session. After an initial positive experience, they organised in-house sessions for fellow MSWs and allied health professionals to bond and raise funds for charity. These initial sessions opened the possibility of using art as a medium to engage patients as well. This supported existing literature that documents expressive art as a medium for psychosocial intervention.



Facilitators of ARTiculate! (From Left to Right: Ms Kelly Tan, Ms Kitty Lee, Ms Ng Tzer Wee, Ms Wong Hui Mei and Ms Karen Poh)

Why ARTiculate! ?

ARTiculate! is envisioned to enhance patients' psychosocial well-being and generate possibilities towards better health. Facilitators are able to help patients process and make meaning of their inner self through this alternative platform, where painting helps them find words to express their thoughts and feelings.

Participants of ARTiculate! include persons who are living with chronic conditions, mild cognitive impairment and life-limiting illnesses, from the young to the old.

To date, more than 8 sessions of ARTiculate! have been conducted both in the outpatient and inpatient settings. ARTiculate! is one of the programmes organised for the Singapore Patient Conference in 2014 and TTSH World Alzheimer's Day 2015. Some of the art pieces are displayed in communal spaces in TTSH today. We can find them in Care Connect, ward 83, ward 9C and Department of Care & Counselling.

Mr T, described below, is an individual who through ARTiculate!, was able to see possibilities when his vision was failing, resulting in better mental health.

Senior MSW Kelly said, **"I have learnt from facilitation of ARTiculate! that it provides patients with a powerful alternative means of sharing their healthcare journey and offers the hospital a creative way to document value in outcomes that are not easily quantifiable."**

Next Steps and how GPs can work with us

- Collaborate with primary care organisations to promote ARTiculate! because the team believes everyone can create art!
- Collaborate with local art schools to expand the variety of expressive arts in healthcare.
- Share patients' healthcare journey and stories through other platforms such as a book on ARTiculate! participants' experiences, fund raising exhibitions and exhibitions in local art galleries to showcase their work.

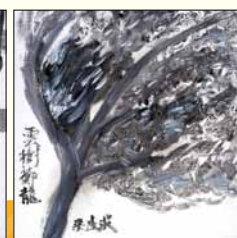
To find out more about ARTiculate!, please email MSW@ttsh.com.sg



Artwork 1



Artwork 2



Artwork 3



Artwork 4

When Mr T was first introduced to his multi-disciplinary team, it was challenging to engage him in a meaningful conversation. His usual response to the team would be "I am okay" until he was invited to participate in ARTiculate!. Artwork 1 was painted soon after Mr T learned about his diagnosis. To Mr T, green bamboo is a symbolisation of strength and served as a reminder to him to be strong like bamboo, during his treatment. He drew a panda with big eyes to symbolise his hope for improvement to his impaired vision.

Unfortunately, Mr T did not experience improvement in his impaired vision. Artworks 2 and 3 were painted when Mr T completely lost vision in his left eye. He felt that his world had turned black and white.

At this point, he was told that he needed a specific medical treatment. In spite of the seemingly hopeless situation, he chose to paint bamboo again to remind himself to stay strong. Artwork 4 was completed when Mr T knew that he was able to go for the specific medical treatment. He painted red cherry blossom and wrote that spring has come because he began to see hope.

From observation of Mr T's experience, one could see that in Asian healthcare settings, where expression of emotions can be difficult for some patients, expressive arts can help them express their emotions through the use of symbols and metaphors. ARTiculate! appears to have much potential contributing to the development of more culturally appropriate practice in healthcare settings in Singapore. [GPBUZZ](#)

Did you catch CRiSP on Channel NewsAsia?



Both A/Prof John Abisheganaden and Dr Low Kee Hwa of Low Medical Clinic in a joint interview for CNA's Singapore Tonight.

TTSH Community Right-Siting Programme (CRiSP) was featured in Channel NewsAsia's Singapore Tonight on 24 June 2016. The feature covered hospitals working with General Practitioners (GPs) to get more stable chronic-condition

patients treated outside the hospitals. A/Prof John Abisheganaden, Clinical Programme Director of TTSH CRiSP, with one of our CRiSP GP partners, Dr Low Kee Hwa of Low Medical Clinic, were interviewed. They both shared the benefits of the programme



A/Prof John Abisheganaden sharing about the challenges that SOCs are facing and the benefits of a close collaboration with GP partners.

through the patient, GP, and hospital's perspectives.

Since CRiSP started in 2014, more than 800 patients have been on this programme, mainly for chronic health management. This arrangement has also led to the hospital saving around 2000 slots in its Specialist Outpatient Clinics (SOCs) in the past two years, and promoted closer collaborations between GPs and Specialists. [GPBUZZ](#)

Gold Award for CRiSP in Asian Hospital Management Awards 2016!

TTSH Community Right-Siting Programme is proud to announce that we are the Gold award winner for the Asian Hospital Management Awards 2016. The award honours hospitals in Asia that have implemented or enhanced outstanding and innovative projects, programmes, and best practices during the prescribed time period.

We would like to thank all our CRiSP GP partners who have journeyed with us over the past two years and for believing in the spirit of the programme. We could not have achieved this without your strong support!



The Primary Care Partners Office team consists of Clinical and Operations Leads, Right-Siting Officers and Programme Administrators.



Receiving the gold award for Innovations in Hospital Management and Governance category.

As we grow this programme to benefit more patients in the community, we seek more like-minded partners to join us in this exciting journey of primary care transformation.

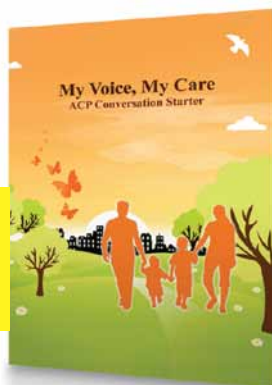
If you are interested to find out more, please contact the Primary Care Partners Office at GP@ttsh.com.sg.

[GPBUZZ](#)

MY VOICE, MY CARE – CHECK OUT OUR ACP CONVERSATION STARTER TODAY!

It's important to make healthcare plans for the future, to ensure you get the medical care that you want.

Advance Care Planning (ACP) is a voluntary process of discussion on future care preferences between patients, their loved ones, and healthcare providers.



The TTSH ACP team has consolidated a set of guiding questions to help patients consider their wishes, values and beliefs. Titled – *My Voice, My Care* – the ACP Conversation Starter aims to prepare patients for an official ACP discussion with a trained facilitator.

The benefits of ACP include:

- Understanding and reflecting on patient's medical condition(s)
- Reducing loved ones' burden in decision-making during difficult situations
- Strengthening patient's relationships with family members and healthcare providers. [GPBUZZ](#)

To find out more, scan the QR code or visit us at www.ttsh.com.sg/acp



JOURNEYING WITH YOU

TTSH's Department of Palliative Medicine is organising its annual public forum, in conjunction with World Hospice and Palliative Care Day 2016! The forum will raise awareness and understanding of the needs and concerns of patients with life limiting illnesses. This year's theme – *Journeying with you* – recognises the need to make information more accessible in the community, as well as to provide continuing support for patients and caregivers. [GPBUZZ](#)

Join us at Toa Payoh HDB Hub B1 Auditorium on 8 October 2016 to find out how to care for loved ones with chronic and disabling health conditions, through personal stories shared by our healthcare team.



Register with us today by scanning the QR code or going to <http://bit.ly/whpc2016>



DYING WELL: PROJECT CARE

In 2009, Tan Tock Seng Hospital (TTSH) launched Project CARE, where a multi-disciplinary care team partners nursing homes to provide quality End-Of-Life (EOL) care to residents.

The Project CARE team works closely with General Practitioners (GPs) engaged by the nursing homes to conduct Advance Care Planning (ACP) and provide joint care to EOL residents. GPs manage residents' routine care, medication administration and act as witnesses for ACPs. The Project CARE team assists in ACP facilitation, medication titration, and conducts review visits



▲ Nursing home residents get to remain in an environment familiar to them while receiving treatment from the Project CARE team.

as well as emergency visits to provide symptoms control or manage exacerbations. Such collaborations

between TTSH and GPs have enabled right-siting of care and reduced cost to the healthcare system. [GPBUZZ](#)

Nursing home GPs interested in participating in Project CARE can contact Ms June Tan at 6359 6469.

THE CHALLENGE OF ANTIMICROBIAL RESISTANCE TO GLOBAL PUBLIC HEALTH

By **Dr Hsu Li Yang**, Head and Senior Consultant, Department of Infectious Diseases, Institute of Infectious Diseases and Epidemiology (IIDE), Tan Tock Seng Hospital



'Antimicrobial resistance' is a term commonly used in reference to bacterial pathogens that cause nosocomial infections. Because of their ability to adapt and evolve, all microbes can develop resistance to drugs used against them. Antimicrobial resistance becomes an escalating problem in microbes that cause human and veterinary disease, particularly with tuberculosis and malaria.

Causes of antimicrobial resistance have been reduced to a single axiom - antibiotic abuse and overuse - and the problem is exacerbated by globalisation, as well as a dearth of new drugs. Solutions based on reduced parameters of antimicrobial resistance will still be useful, but present less of an impact or temporal durability than anticipated. [GPBUZZ](#)



EYE DISCOVERIES: EVOLUTION OF CATARACT SURGERY – FEMTOSECOND LASER ASSISTED CATARACT SURGERY (FLACS)

By **Dr Yeo Tun Kuan**, Consultant, Department of Ophthalmology, National Healthcare Group Eye Institute, Tan Tock Seng Hospital



Scan this QR code to read the article online.

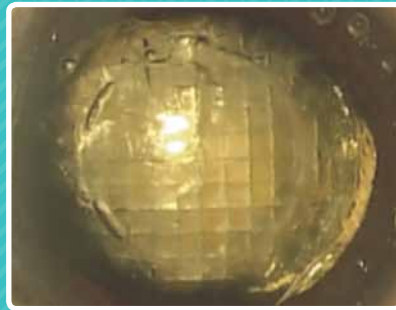
Since its inception in 2001, the National Health Group (NHG) Eye Institute has continued to address the increasing demand for eye care services, and areas of its research and training. It incorporates

Tan Tock Seng Hospital's (TSSH) Department of Ophthalmology as its flagship clinical unit, and delivers quality tertiary and primary eye care to patients in Singapore and the region. With more than 32 fellowship-trained consultants on-board, the Institute covers the entire spectrum of ophthalmic subspecialties, providing comprehensive diagnosis and advanced treatment for both common and complex eye diseases.

In part three of the 'Eye Discoveries' series by the NHG Eye Institute, we will be taking a look at the evolution of cataract surgery, and the benefits conferred to patients and surgeons, through the introduction of Femtosecond Laser Assisted Cataract Surgery (FLACS).

Cataract surgery has evolved rapidly over the years. The last few years have seen the advent of a new technology called FLACS, which promises advantages to both the patient and surgeon.

Femtosecond lasers emit ultra-short pulses of energy similar to those used in LASIK. The speed and accuracy of the laser enables it to cut eye tissue with great consistency and precision. With FLACS, this automated



« Femtosecond Laser Fragmentation of Cataract. Photograph courtesy of Abbott Medical Optics.



« Cataract

laser can be used to create cornea wounds, open the lens capsule and fragment the cataract into tiny pieces – steps traditionally done by the surgeon manually. It can also be used to reduce astigmatism during cataract surgery. All this is achieved through high resolution scans of the eye during the laser process. To complete the surgery, phacoemulsification is used to remove the cataract fragments, using ultrasound energy.

Femtosecond laser techniques allow for more precise and consistent procedures. Although it is not possible to completely avoid human errors, even the most complex cases can benefit from FLACS, with reduced risk of surgical complications. This offers a greater level of safety to both the patient and surgeon alike. During cataract surgery, a circular opening on the lens capsule (capsulorrhexis) needs

to be created. The capsulorrhexis created by the laser is shown to be consistently more circular than a manually-performed one. In addition, as all corneas experience some degree of endothelial cell loss after phacoemulsification during cataract surgery, lower amounts of ultrasound energy expended in FLACS may also reduce the risk of corneal endothelium injury. All these translate to potential improved visual outcomes for the patient.

FLACS is an advanced and exciting technology that offers various advantages. It is going to change the way we routinely perform cataract surgery. Looks like the time when a patient says that he had his cataract ‘lasered away’ has finally arrived. [GPBUZZ](#)



NHG Eye Institute Direct Access Hotline:

NHG Eye Institute is able to accommodate same-day/next day appointments. Depending on the level of care needed and the requested timing, most patients can be seen by an Eye specialist on the same day especially for requests received in the morning. For appointments, GPs should call 6359 6500.



"SMART" KNEE REPLACEMENTS - TURNING PAINFUL YEARS INTO GOLDEN YEARS

By **Dr Henry Chan Ying Ho**, Consultant, Department of Orthopaedic Surgery, Tan Tock Seng Hospital



We have to brace ourselves to face the aftermath of a rapidly aging population: with an exponential increase in patients suffering from osteoarthritis, of which the knee joint is the most commonly affected joint.

While early osteoarthritis can be managed with medication, physiotherapy and lifestyle modifications, knee replacements remain the only option for patients suffering severe osteoarthritis.

A primary goal for knee replacement is the restoration of the normal alignment of the lower limbs. Traditional techniques require a lot of visual judgement from surgeons,



⚡ An example of intra-operative computer navigated knee replacement.

this is prone to error and significant malalignment was found in up to 30% of the knee replacements - this will significantly accelerate the wear and tear, eventually leading to premature implant failure.

With the aid of computer navigation, the anatomical landmarks of operated limbs are captured, and the alignment

of the cutting instruments can be reflected in real time. Ligamentous balancing can be fine-tuned as well, by studying the kinematics of the replaced knee joint.

3D printing technology can also be used in knee replacement surgeries. Patients will undergo a pre-op MRI scan of the lower limb, allowing the sizing, positioning and alignment of the implants to be pre-determined. These 3D printed patient specific instruments (PSI) will fit onto the patients' knee joint perfectly, and allow the surgeons to perform the knee replacements quickly and accurately.

There are other benefits to these techniques as well: reduced blood loss and reduced risk of embolic events, because the medullary cavity of the bone will no longer be violated (a requirement in traditional techniques).

Overall, "SMART" knee replacements are well established in many centres worldwide and have shown to improve their accuracy and results. [GPBUZZ](#)



⚡ An example of the 3D printed Patient Specific Instruments (PSI) being fitted onto the distal femur.

Knee Replacement and other orthopaedic-related services are available at Tan Tock Seng Hospital's Orthopaedic Clinic B1B.

For appointments, GPs should call 6359 6500.



Scan this QR code to read the article online.

IS ALL RHINITIS DUE TO ALLERGY?



By **Dr Lim Keng Hua**, Consultant, Department of Otorhinolaryngology, Tan Tock Seng Hospital

“Doc, my ‘sinuses’ are acting up,” – a common complaint encountered by General Practitioners. Often, what the patient actually refers to is allergic rhinitis, which is commonplace in Singapore.

CAUSES OF RHINITIS

Besides allergies, other causes of rhinitis include:

- Atrophic rhinitis
- Rhinitis of pregnancy
- Nasal polyps/tumour
- Occupation rhinitis (e.g. wood dust)
- Cerebral spinal fluid (CSF) rhinorrhoea
- Structural abnormalities (e.g. deviated nasal septum)
- Medication such as sildenafil, methyldopa, ACE inhibitors and beta-blockers, NSAIDs, antidepressants
- Systemic disease (e.g. granulomatous disease like sarcoidosis, hypothyroidism, immuno-deficiencies)

NON-ALLERGIC RHINITIS

Non-allergic rhinitis is a diagnosis of exclusion. It is distinguished from allergic rhinitis by the following:

- Onset at a later age
- Perennial symptoms
- Absence of nasal or ocular itch and excessive sneezing
- Prominent symptom of nasal congestion and post nasal drip

Typical trigger factors include household cleaning products, changes in temperature, perfumes, tobacco smoke, car exhaust and alcoholic beverages.

Two common subtypes are:

- Gustatory rhinitis, a vagal mediated reflex, that caused clear rhinorrhoea during meals.
- Vasomotor rhinitis or idiopathic rhinitis characterised by intermittent symptoms of congestion and/or watery rhinorrhoea when exposed to non-specific irritants e.g. air pollution or temperature change especially cold, dry air.



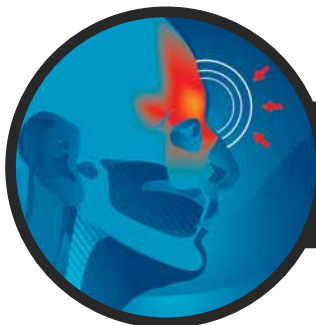
⚡ Deviated nasal septum to right



⚡ Nasal polyps

HOW TO KNOW THE CAUSE OF RHINITIS?

A detailed history focusing on identifying the triggering factor is taken. A thorough workout is performed to establish the cause of rhinitis. An allergy test (e.g. a skin prick test or in vitro testing) is performed to identify the specific allergen. This guides allergen avoidance and immunotherapy. A nasoendoscopy is performed to exclude structural causes and tumour. [GPBUZZ](#)



Nasoendoscopy and other otorhinolaryngology-related services are available at Tan Tock Seng Hospital’s ENT Clinic (Clinic 1B). For appointments, GPs should call 6359 6500.

THE GIFT OF HEALTH



Scan this QR code to read the article online.

By **Ernest Wong**, Dietitian, Department of Nutrition & Dietetics, Tan Tock Seng Hospital



This Christmas, let's remember that health is the greatest gift, with these healthy eating tips prepared especially for the occasion.



INDULGE IN A BALANCED MEAL

Be it a buffet or Christmas roast, remember to portion half of your plate with fruit and vegetables, a quarter with lean meat, and the other quarter with whole-grain food.



ENJOY TREATS IN SMALL AMOUNTS

Sugar-filled cakes and desserts can cause weight gain in excess. Limit your sugar intake to less than 10 teaspoons daily - a slice of cake or a bar of chocolate contains 4 teaspoons each.



DRINK WISELY

Water or sugar-free

beverages are wise choices to consume for parties and celebrations. If you consume alcohol, remember to limit it to a standard drink for ladies and two standard drinks for men, per day. A standard drink equates to a can of beer (330ml); half glass of wine (175ml); or a shot of hard liquor (35ml).



DON'T FORGET TO KEEP ACTIVE

Participate in moderate-intensity physical activity five days weekly for around 30 minutes each, to work off the excess food consumed. [GPBUZZ](#)



Recipe:

Christmas Overnight Oats

½ cup raw oats

½ cup low-fat/skim milk

⅓ cup cubed strawberries

⅓ cup cubed green kiwi

2 tablespoons all-bran

Sprinkle of allspice/cinnamon powder (optional)

- 1) Alternate layers of raw oats, all-bran, strawberries and green kiwi in a glass bottle or cup.
- 2) Pour in the milk and sprinkle allspice/cinnamon powder on top.
- 3) Let the mixture soak overnight in the fridge and enjoy the next morning.



Nutrition information per 100g/serve:

	Per 100g	Per serve (258g)
Energy (kcal)	99	255
Protein (g)	4	11
Carbohydrates (g)	19	50
- of which sugars (g)	5	14
Fats (g)	1	4
- of which saturated (g)	0	1
- of which trans (g)	0	0
- of which cholesterol (mg)	1	2
Dietary fibre (g)	3	9
Sodium (mg)	29	75

PHARMACOGENETIC TESTING

– COMING TO A LABORATORY NEAR YOU

By **Dr Leong Khai Pang**, Senior Consultant, Department of Rheumatology, Allergy and Immunology, Tan Tock Seng Hospital



Medicines don't always work as we'd like them to. Doctors would be very happy to be able to predict the result of a medication in any given patient, and the fact is, tests do exist, some of which we shall discuss.

The cytochrome (CYP) system is an important route for metabolising drugs. Concentrations of psychiatric drugs such as amitriptyline, clomazepine, and fluoxetine may be excessive in patients with low CYP2D6 metabolic activity. Clopidogrel, a pro-drug, is converted to

the active form by CYP2C19. Slow metabolisers experience diminished anti-platelet effect. Similarly, codeine is activated by conversion to morphine by CYP2D6; ultra-metabolisers may develop toxicity.

Variants in the thiopurine methyltransferase enzyme and NUDT15 genes determine the risk of leucopaenia due to thiopurines such as azathioprine. The effect of warfarin is influenced by VKOR1 and CYP2C6.

HLA B*1502 is associated with severe cutaneous allergic reactions due to carbamazepine, HLA B*5801 to allopurinol and HLA B*5701 to

abacavir. Since 29 September 2013, the Singapore Ministry of Health mandates that clinicians ascertain the HLA B*1502 status before prescribing carbamazepine.

It has been hard to show conclusive proof of cost-effectiveness in all cases. This means that administering tests and using non-cross-reacting alternatives cannot be shown to be consistently cheaper than simply not testing and treating adverse reactions as they arise.

As we understand more about the performance of these tests, they will become routine in our medical practice in the immediate future. **GPBUZZ**

CME (OCTOBER - DECEMBER 2016)

TITLE	CME POINTS	DATE	TIME	VENUE	REGISTRATION DETAILS
7th Singapore International Parkinson Disease and Movement Disorders Symposium	Pre-symposium: Max 4 points Main Symposium: Max 8 points	29 September – 1 October 2016	Pre-symposium: 8.30am to 4.50pm Main symposium: 8.00am to 5.30pm	The Academia, Level 1 Auditorium 20 College Road, Singapore 169856	Please email: nni_secretariat@nni.com.sg or call 6357 7163/7640 .
16th Singapore Stroke Conference	To be confirmed	6 – 8 October 2016	8.00am to 5.30pm	The Academia, Level 1 Auditorium 20 College Road, Singapore 169856	
Department of Gastroenterology & Hepatology GP Symposium	To be confirmed	12 November 2016	1.00pm to 5.00pm	Thearette, Level 1, Tan Tock Seng Hospital	Please email: han_fong_chiang@ttsh.com.sg or call 6357 7897 .
GP Symposium: Pancreas Cancer - a neglected stepchild in Oncology?	2 core points	26 November 2016	1.00pm to 4.00pm	Seminar Rooms 1 & 2, Level 3, Tan Tock Seng Hospital	Please email: Mandy_Sq_TAN@ttsh.com.sg or call 6357 2637 .

A confirmation email will be sent after your registration. Kindly email the contact person if you do not receive any confirmation after your registration. Thank you.

3 Steps for referring patients to TTSH.

Here's a comprehensive chart listing the steps to refer non-subsidised patients and patients under the Community Health Assist Scheme (CHAS) to Tan Tock Seng Hospital (TTSH).



To ensure your patients are seen promptly at TTSH, triaging may be conducted by our staff. You may be required to fax referral letter and CHAS cover note to TTSH GP Appointment Hotline or Specialist Outpatient Clinic.

Please retain a copy of the documents for reference purpose.