



A Home Within A Hospital

The road to recovery from illness, injury or surgery can be long and challenging. Patients are often anxious to get back to the comforts of home and to independent living.

What if the hospital itself has a home-like environment, with an integrated range of acute and sub-acute facilities and services? Would this home-within-a-hospital help speed up recovery and rehabilitation for patients?

That's the hope.

Which is why a first-of-its-kind community care model is being developed by Changi General Hospital (CGH), in collaboration with St. Andrew's Community Hospital (SACH). Called the Integrated Building, the 280-bed, 8-storey facility is part of the Ministry of Health's Healthcare 2020 Masterplan and will be completed by 2014.

Under this new community care model, patients will enjoy a conducive environment that maximises their recovery and prepares them for independent living back home.

Redefining Hospital Care

Through the integration of care paths, healthcare professionals from both CGH and SACH can collaborate and learn from one another to help their patients transit back to their daily lives.

In a normal hospital, patients spend most of their time in bed, but the new model of care gives 'wards' a fresh, new meaning and enables patients to play an active role in their recovery.

At first glance, the interior of the Integrated Building resembles a real home.

Designed with the concept of 'cluster housing', the wards simulate the setting of an actual home by incorporating home-like features. Each ward will have three 10-bed clusters equipped with:

- One living room for interaction between patients and families
- Common dining and family areas for patients to interact with their families or have meals together

Such a setting comes as a breath of fresh air to patients, who may be there because of a stroke or a hip fracture.

The home-like environment enhances their recovery process, complemented by intensive therapy tailored to meet specific rehabilitation needs.

Those who recover well enough to return home may still require some adjustments, especially patients in wheelchairs or crutches.

Teaming Up

Once the Integrated Building becomes operational towards the end of 2014, healthcare professionals from CGH and SACH will work towards integrating processes and workflow for better efficiency and convenience for patients.

While it will help to encourage collaboration among all the healthcare professionals, another form of sharing will also take place in the Integrated Building. Common resources such as pharmacy supplies, laboratory services, and even beds will be shared between both hospitals. Beds in the Integrated Building will be 'acuity adaptable' to allow the easy switching between those for acute, sub-acute or rehabilitative care when necessary. Patients will benefit from this new model of rehabilitation as care is made better and more convenient.

The facility will also function as a test-bed for new, innovative ideas to make healthcare facilities more age and staff-friendly. This new model of rehabilitation in the Integrated Building ushers in a new phase in Singapore's healthcare sector, as more quality and innovative facilities are planned to meet future healthcare needs.



A Perfect Match

The full range of rehabilitation facilities in the Integrated Building marries the best of both home and hospital. It brings together the comforts of home and the professional care and service delivery of a hospital.

Hospital patients suffering from conditions such as stroke, brain and spine injuries will find the transition back to their own homes easier when they begin their journey to recovery in the conducive home-like facilities.

The different facilities housed in the Integrated Building serve a diverse range of needs for patients.



Staying Active in Recovery

Patients are guided towards their rehabilitation goals at the **Active Recovery and Therapy Centre** by playing an active role in their own recovery journey. The use of evidence-based programmes, facilities and equipment such as the Therapy Gardens and robotics technology are key to the centre's function. The landscaped Therapy Gardens are tranquil outdoor environments that will challenge patients to manoeuvre steps, curbs, slopes and ramps as part of their guided therapy.



Gaining Independence

To build up their level of independence in the work and home environment, the **Centre for Independent Living** will enable patients to explore therapies and assistive methods. The Centre incorporates a mock three-room flat for practising purposes as patients slowly get back their confidence to resume daily activities by regaining specific functions in their home and work life.



Focusing on the Elderly

Elderly with more complex needs can visit the **Geriatric Day Hospital**, where medical, nursing and rehabilitation care are all readily available.



Getting Back on Track

The main rehabilitative services at CGH have been expanded to **Rehabilitative Services @ The IB**. More patients will stand to benefit from this facility as they continue working towards optimised functionality.



Returning for Rehabilitation

After patients are discharged, they might be required to return to the **SACH Day Rehabilitation Centre** for active rehabilitation services, under a shared care model with CGH rehabilitation physicians.

Educating Trail Blazing Doctors



They will be the next generation of doctors, blazing new trails and meeting emerging needs.

By 2018, this pioneer batch of students from the new Lee Kong Chian School of Medicine (LKCMedicine) will graduate with a well-grounded understanding of medicine and useful knowledge on interdisciplinary topics such as business management, humanities and technology.

The Imperial-NTU MBBS (Bachelor of Medicine and Bachelor of Surgery), a five-year undergraduate medical degree programme, is offered as a joint collaboration between Imperial College London and Nanyang Technological University (NTU) to nurture and develop tomorrow's doctors.

This year, the first cohort will begin their journey at LKCMedicine with an all-new, innovative medical curriculum.

Cutting-edge Campus & Collaborative Learning

The dual campus at Novena and Yunnan Garden is a modern purpose-built and sustainable medical campus that promotes collaborative learning and interaction among staff, students and researchers. With facilities designed with the learner in mind, the advanced world-class research infrastructure will create a vibrant campus experience.

Doctors are often expected to react quickly in times of emergency and this ability is nurtured with practice and experience. In this aspect, students at LKCMedicine are given a useful head start with their exposure to clinical training that occurs across the full range of healthcare environments. Students will be given earlier, more extensive exposure to clinical environments and patients than in most traditional medical programmes, so that the ethos of putting patients at the heart of what they do is central to the care they will deliver as doctors of the future.

A Taste of Real Medicine – Students can familiarise themselves in real-life clinical settings at Tan Tock Seng Hospital, which is a stone's throw away from the School's Novena campus. The campus houses the high-rise Clinical Sciences Building and the School's Headquarters.

Promoting Interdisciplinary Collaboration – Close partnerships of engineering, biological sciences and medicine can be easily forged at the Yunnan Garden campus. Linked directly to the School of Biological Sciences within NTU's biomedical-engineering cluster, the strategic location of the Experimental Medicine Building opens up unlimited possibilities to explore cross-discipline projects among students and researchers.



Meeting Future Needs

Advanced facilities include learning studios, 'alcove clusters', seminar rooms facilitating team-based learning, recreational hubs and state-of-the-art teaching and research laboratories. Key focus will be on effective learning and academic research.

Effective Learning – Spaces for student learning are no longer restricted to traditional, large lecture theatres. Instead, new venues with full IT access and audio-video technology for small and large group interactions will facilitate learning.

For the practical aspect of their studies, students will learn through interaction with simulated patients (actors) in dedicated facilities. The examination and practical skills (e.g. life support, suturing and catheterisation) on training mannequins as well as through hybrid simulation (where a bench-top model is used in conjunction with a simulated patient) helps the student to understand and apply these professional skills in context.

Academic Research – Both campuses will feature top-class research facilities to support and reinforce the School's strategic focus areas in biomedical engineering, synthetic integrative biological engineering, infectious diseases, metabolic diseases (including diabetes), neuroscience and mental health, and health services research.

Healthscope puts the spotlight on healthcare professionals, giving an insight into what drives them at work, at home and at leisure. It is in tandem with ongoing efforts by the Ministry of Health to raise the profile of healthcare professionals through a branding strategy, under the tagline *Caretogobeyond*.

We feature two healthcare professionals who exemplify the spirit of always striving to go beyond the ordinary and the expected.



Making Each Day Meaningful

He believes in doing meaningful things and living life with few regrets. And Professor John Wong has certainly never regretted his 25 years of sterling public service.

As Director of the National University Cancer Institute, Singapore (NCIS), the 56-year-old medical oncologist-haematologist is still as motivated as ever in doing his best to overcome Singapore's healthcare challenges.

The father of two shares with *Healthscope* what makes his work – and his life – meaningful.

Can you describe briefly the key challenges facing oncologists today?

Although we now know more about cancer than ever before, and can obtain significant responses for many cases of advanced cancer with some entering prolonged remission, we face a rapidly rising incidence of the disease, substantial cost of care, and challenges in discussing end of life issues with patients and their families. Much more needs to be done in cancer prevention and screening for breast, colorectal, and cervical cancer. We need better primary and home care for cancer patients.

In the field of oncology, what are the key milestones that you have witnessed and been involved in over the years?

I have been fortunate to witness the development of a whole slew of effective drugs targeted at specific receptors and pathways in nearly every form of cancer and complication of cancer or its treatment. I have also seen major advances in how we deliver chemotherapy, from oral formulations to novel “packaging” for better efficacy. There have also been major advances in surgical, radiation, nursing, pharmacy oncology, palliative care, imaging of cancer, and new classifications of specific cancers based on genomics.

I have been involved with the development of internationally competitive and comprehensive cancer programmes at NUS and NUH; the development of remarkable women and men in multiple fields of oncology; and the development of the Biomedical Sciences (BMS) Initiative, which is an integrated approach involving the establishment of research infrastructure, industry support, venture capital support and the enhancement of manpower capabilities within the cluster.

On top of your work in the Institute, you are active on many boards and committees overseeing oncology-related issues. How different are the challenges that come along with these responsibilities?

The challenges remain the same: identifying strengths of different people and seeing how everyone can best work together; developing the next generation of staff; making best use of limited resources; ensuring that people are aware of what is being done; and identifying potential collaborators who share our vision.

You have won awards including the Public Administration Medal (Silver) and the National Outstanding Clinician Award for your medicine and clinical research over the years. How do you feel about receiving such recognition and honours?

Anything that I have accomplished is because there were a lot of people who helped and guided me. I am deeply humbled and honoured by these awards but the recognition should go to those who allowed me to do what I do.

You have been in public service throughout your career. Have you ever considered entering private practice? Why or why not?

Yes, I have considered private practice but being a doctor to me means providing a social service and I feel that I can currently do this best in the public sector. Singapore faces enormous healthcare challenges and I feel that I can contribute more by being where I am today. We have some of the most altruistic and talented young women and men entering healthcare professions. I would like to help them realise their potential and idealism, just as my mentors have helped me. Working in the University also allows me the opportunity to learn from experts from so many disciplines.



Going to Great Depths

Often seen as a living example by his patients, Mr Desmond Tong does not shy away from talking about his disability – an amputated right leg from the knee down.

Now back at Tan Tock Seng Hospital where he was given a new lease of life in the form of an artificial limb, he is no longer a patient, but a Prosthetist/Orthotist motivating amputees in their rehabilitation process.

The 35-year-old tells *Healthscope* about his toughest challenges and his dedication to helping patients get on with life.

What do you do as a Prosthetist?

As a Prosthetist, I see patients who are amputees. From the start, a new amputee can be referred to me for advice and introduction to Prosthetics, which includes the manufacturing process, cost of device, functions, limitations and rehabilitation process. I also make the artificial limb and I am responsible for the fitting, alignment setting and future care and maintenance of the artificial limb.

Share with us your journey and circumstances which led you to take up a career in Prosthetics and Orthotics.

My journey began in 1999 when I was involved in an accident that led to the amputation of my right leg below the knee. I became a patient at the place I currently work. As a patient here, I was inspired and motivated by my Prosthetist who encouraged me to pursue my dream to be a Prosthetist myself. So here I am. My passion to help others like myself also played a very huge part in my choice of profession.

What are the challenges you face?

One of the greatest challenges I face in my career is my own physical limitations as an amputee such as not being able to squat down for cast taking (due to my artificial limb) and also not being able to stand or walk for long periods. I have however overcome these limitations by modifying the way I do the tasks, such as sitting on a short stool and taking short breaks between long periods of standing and walking.

What gives you the greatest joy and fulfilment?

My greatest joy is seeing my patients get back on their feet again “literally”. Seeing a happy patient achieve independence in their daily lives, with an improved quality of life, after amputation is truly priceless. A simple smile on their face and a thank-you from my patients really makes my day and keeps me going and motivated.

As a user of artificial limbs yourself, you still go dirt biking, swim, play basketball and badminton, and drive. Where do you draw your strength and energy to do so much? Does this make you a living example to patients of what is possible as an amputee?

I do not see a distinction between able-bodied and handicapped people. It is simply a matter of finding time to do the things you like to do. For the handicapped, it is a matter of overcoming the obstacles placed before you to complete the task. A handicapped person could play sports like basketball with prosthesis but if he or she is not able to do so, wheelchair basketball can be an alternative. As for being a living example, I do have patients sharing with me that they felt motivated to work hard on their rehabilitation after seeing me. They know that it is possible and they can do it too.

Do you see yourself as a motivator who is able to relate to the patients? How do you help your patients regain their confidence and adopt an active lifestyle?

I see myself more of a friend who has a life story to share, rather than a motivator. I tend to share my personal life experiences with my patients and the entire process from losing my leg, the pain and difficulties I have encountered, the moments I was about to give up, to being able to run and do sports. I often share about Positivism and Perseverance being the two keys to help us overcome obstacles.