SAF’S FORCE HEALTH TRANSFORMATION

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ABSTRACT

Healthcare for the SAF has evolved over the last 50 years, together with the SAF’s progress and changing national healthcare landscape. Today, the SAF’s Force Health is looked after by a robust medical system that is professionally governed and on par with national clinical standards and best practices. In the early days, SAF’s healthcare provision was decentralised, as the individual Medical Services oversaw the provision of healthcare to their respective services. In 2008, the new Military Medicine Institute (MMI) was formed as the main entity entrusted with ensuring the health of the SAF, through the provision and governance of primary and specialist healthcare, as well as emergency medical care to our soldiers. The article explains MMI’s strategy of systemic improvements to transform healthcare in the SAF by (1) Strengthening Healthcare Governance and Standards, (2) Modernising Healthcare Systems and Infrastructure, and (3) Integrating with the National Healthcare System. The article also highlights the challenges and efforts to manage mental health issues in the SAF, and how a newly developed Soldier Health Framework can optimise SAF’s Force Health through health promotion.

HEALTHCARE IN THE SAF TODAY

In the early days, the individual Medical Services oversaw the provision of healthcare to their respective services, while specialist medical care was provided by the Military Medicine Institute (MMI). Healthcare policies and standards were governed by the Senior Medical Officer’s (SMO) (Healthcare) Office, which was under the command of HQ Medical Corps. This decentralised approach was the model of the SAF’s healthcare provision until the SAF’s 3rd generation transformation.

In 2008, as a key feature of the reorganisation of the SAF Medical Corps, MMI and SMO’s (Healthcare) Office were merged. This new MMI became the main entity entrusted with ensuring the health of the SAF, through the provision and governance of primary and specialist healthcare, as well as emergency medical care to our soldiers. These are delivered via a network of medical and dental centres (assigned into three geographical clusters), as well as specialist medical and dental clinics. This centralisation of command improved and standardised the work processes at the medical centres and promoted sharing of best practices across the three clusters.

Although Air Force and Navy medical centres remain under the command of their respective Services to better meet Service-specific requirements, they adhere to
healthcare policies promulgated by MMI to ensure that healthcare delivery standards are maintained across the SAF.

Whilst primary and specialist healthcare serve to optimise the health and deployability of each soldier, thereby maximising the operational readiness of the SAF’s fighting force, the provision of swift and robust emergency medical care is a key enabler for tough and realistic training for war and operations. In this area, MMI medical centres are always ready to respond to medical emergencies that may arise during rigorous military training. To maintain the proficiency of medical personnel, medical centres conduct frequent resuscitation drills and refresher training for trauma management.

These services and capabilities are supported by MMI’s Medical Affairs and Healthcare Programmes office, whose role include managing feedback from servicemen and the public, co-ordinating training and education for medical personnel, overseeing medical logistics and infrastructure, as well as handling contracts and collaborations with external healthcare institutions.

TRANSFORMING HEALTHCARE

Since its inception in 2008, MMI has undertaken efforts to transform healthcare in the SAF to raise the standard of healthcare delivery by adopting a strategy of systematic improvements.

Strengthening Healthcare Governance and Standards

Recognising the need to strengthen the governance of the medical system, a three-tier system was put in place in 2011, comprising the SAF Medical Advisory Board, five SAF Specialist Advisory Boards and 37 SAF Visiting Consultants representing 23 different clinical specialties. Constituted by senior, experienced and respected medical leaders, the boards and group of visiting consultants now advise the SAF on a broad range of issues, from benchmarking our standards and programmes, to providing expert inputs for individual complex medical cases.

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In 2013, an initiative to raise the standard of healthcare delivery in the SAF was introduced. The programme involves the engagement of senior family physicians to work alongside our Full-Time National Servicemen (NSF) Medical Officers (MO), providing on-site supervision and mentorship, a system that mirrors that in the public institutions. This has effectively deepened the medical expertise and experience at SAF medical centres, and has engendered greater trust and confidence of both our servicemen and the public in the SAF Medical System.

In the area of training, MMI’s implementation of the Mobile Medical Evaluation Team (MobileMET) system as well as Protected Training Time initiative had resulted in higher levels of readiness amongst medical centre staff. MobileMET, which started in 2011, provides an objective
and realistic modality to train and assess individual and team-based proficiency in the setting of the medical personnel’s own centres. Protected Training Time, scheduled up to twice a quarter, allows medical personnel to attend off-site continual medical education sessions, for example by conducting refresher training at the Medical Simulation Training Centre in the SAF Medical Training Institute to hone their skills in managing medical emergency cases.

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**Modernising Healthcare Systems and Infrastructure**

In 1995, the SAF Medical Corps implemented a large scale Electronic Medical Records (EMR) system, the first of its kind in Singapore, across 36 medical, 11 dental and four specialised centres. Known as the Patient Care Enhancement System (PACES), it ran on the Windows 3.1 environment and was designed to manage health-related information and medical logistics in the SAF. Considering that public healthcare institutions at that time were operating on physical records, the system was state-of-the-art. In 2004, the SAF implemented the second generation system, PACES 2, which allowed for greater data upload and analysis, mass screening and image handling capabilities, as well as interfaces with external healthcare and logistics systems.
The SAF’s third generation EMR system, PACES 3, was rolled out in April 2016. PACES 3 is based on an established software system used by several of Singapore’s public hospitals as well as numerous medical institutions worldwide, but it has been heavily customised to meet the SAF’s requirements. It has unprecedented functionalities and connectivity. For example, the eHealth Portal, accessible on the Internet, allows quick access to appointment bookings and requests for medical reports. Servicemen can also access their own clinical information like test results, allergies and immunisations, and military information like Physical Employment Status PES, and health and FFI screening outcomes. PACES 3’s Clinical Decision Support features like the allergy and drug interaction alerts will increase patient safety. Also, because PACES 3 is integrated with the National Electronic Health Record system, clinical records can be easily viewed through a context-switching feature. This not only allows our MOs to have more of the patient’s clinical information on hand, but also avoids having tests repeated unnecessarily.

In the area of infrastructure and equipping, the Medical Corps has operation-alised new medical centres and equipment through a systematic modernisation process. The tender for a comprehensive infrastructure upgrading of all SAF medical centres is also about to be launched, paving the way to further refreshing the look and feel of SAF medical centres.

**Integrating with the National Healthcare System**

“Every one of our servicemen, especially Operationally Ready National Servicemen (NSmen), is a civilian. MINDEF and the SAF’s philosophy have always been to design our healthcare system to be integrated as part of the national system. In this way, the SAF can benefit from the advances and the capacity of the civilian healthcare system. Likewise, the civilian system can also draw upon the capabilities and capacity of the SAF.”

-Then Second Minister for Defence, Mr Chan Chun Sing at the opening ceremony of the SAF Cardiac Fitness Centre 16th January 2015.
An example of how the SAF’s healthcare system has integrated with the nation’s is the SAF Cardiac Fitness Centre (SCFC). Officially opened in 2015, SCFC provides dedicated, expedited specialised cardiac service for the SAF. By significantly shortening the waiting time for a cardiac appointment, the creation of SCFC has served to reduce enlistment wait times for pre-enlistees and minimise training and deployment downtimes for enlisted personnel. This is an example of how our collaborations with public healthcare institutions, in this case, the National Heart Centre Singapore, have brought benefits to the SAF.

The co-location of SCFC with the National Heart Research Institute Singapore (NHRIS) also means that the SAF is able to now tap on the research experience of a renowned institute to study the cardiac health of our personnel and to validate the SAF’s screening protocols.

EMERGING HEALTH CHALLENGES

The Singapore Mental Health Study 2010 found that about one in 10 people in Singapore suffer from a mental disorder, with the onset of serious mental conditions like schizophrenia and psychosis usually occurring in adolescence or young adulthood.2 As a conscript army, the SAF’s trends can be expected to reflect the nation’s, especially for NSFs.

Moreover, it is recognised that recruits in the military would need to undergo a period of psychological and emotional adjustment to the new environment. Common issues they face include homesickness, coping with regimentation and punishment, managing relationships with superiors and peers, difficulties in coping with physical training demands and perceived under-achievement, loss of ‘freedom’ and individuality, adjusting to communal living, potential exacerbation of personal issues, and difficulties in moving from an environment that is focused on oneself to one that is focused on team work to achieve the greater good.3

These points of adjustment could, either singly or in combination, act as stressors to trigger or worsen any pre-existing mental health conditions. Therefore, as part of the current medical screening process, pre-enlistees are screened for pre-existing mental health conditions and also undergo a mental health risk assessment to accurately assign medical classification. However, mental health conditions, unlike organic diseases that are associated with physical signs or physiologically derangements, can be challenging to pick up from otherwise normal appearing individuals. As such, there is scope to explore novel ways of screening for psychological illnesses in pre-enlistees. One possibility is the use of biomarkers as an adjunct to mental health screening.4 Biomarkers include certain blood proteins that can be used to assess the presence or progress of diseases, or even the effects of treatment. Measuring biomarkers lends objectivity to the assessment of medical conditions that are otherwise difficult to diagnose or monitor. Through research and development, it is foreseeable that test panels may be deployed to augment current day medical screening processes.

But managing the mental health for the SAF goes beyond medical screening. Three separate entities, the Defence Psychology Department (DPD), SAF Counselling Centre (SCC), and MMI’s Psychological Care Centre (PCC) now work together closely to form the SAF’s mental health surveillance and support framework. The recent introduction of psychologist positions in the Divisions, Commands, and Formations across all three Services will further augment this framework.
The role of these psychologists is to closely monitor and manage servicemen with mental health issues together with their commanders and unit medical officers, hence improving the ground management of at-risk personnel. It has allowed PCC to prioritise its efforts on mental healthcare provision to manage personnel who require a higher level of care or have complex specialist needs.

**OPTIMISING FORCE HEALTH THROUGH HEALTH PROMOTION**

Every year, more than 20,000 young Singaporean males are enlisted into National Service. This constantly renewed pool of audience represents an excellent platform for health promotion. Through imbibing practices that can stay with them for their lifetimes, this in turn will also reduce the eventual burden of chronic diseases on the nation.

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The command and control structure in the SAF allows commanders the option to strictly enforce healthy lifestyle changes, but there are limitations to this approach. It is useful when it comes to providing healthier food choices in SAF cookhouses, but less useful when it comes to behavioural change issues such as smoking cessation. New approaches will be required to encourage adopting healthy lifestyle habits and ensure that such improvements are sustainable. A multi-prong approach that is person-centric, respects personal choice and includes multiple centres of gravity with ground-up initiatives will be more successful and sustainable for the SAF.

Recognising the potential long term benefits of health promotion in the SAF, the MINDEF Healthy Lifestyle Steering Committee (MHLSC) was formed in 1991 to oversee workplace health promotion policies and to facilitate and monitor the implementation of healthy lifestyle activities in MINDEF/SAF. MMI, as the secretariat to MHLSC, has been given the mandate to review the health promotion framework and recommend focus areas for health promotion in the SAF.

Currently at the national level, efforts to improve population health and mitigate the effects of an ageing population have taken on a Whole-of-Government (WoG) approach, guided by the national Healthy Living Master Plan that incorporated novel programmes such as Healthy Communities and Health Promoting Malls. At the workplace, health has been reframed as an enabler for productivity and performance and that has changed how the public and private sectors as well as generation population think about health and health-related lifestyle choices.

This year, a new Soldier Health Framework has been developed to incorporate these up-to-date approaches to health promotion. It takes into account SAF’s unique workplace setting and places the soldier at the centre of the framework. The framework recognises that Performance, Productivity and Living Well are three domains that are important to both the individual and the organisation. Each domain is guided by two focus areas, which then translate to the soldier’s desired
outcome of being Fit for Life, Mission-Focused and having a Healthy Body. The proposed framework encapsulates the current healthy lifestyle efforts within MINDEF/SAF, and will guide future programme development in a coherent and strategic manner.

There are almost no downsides to promoting health in our servicemen, especially when there is a current surge in efforts at the national level. It is an opportune time to ride on this wave to maximise the benefits of health promotion to the SAF.

Today, the SAF’s Force Health is looked after by a robust medical system that is professionally governed and on par with national clinical standards and best practices.

CONCLUSION

Healthcare for the SAF has evolved over the last 50 years, together with the SAF’s progress and changing national healthcare landscape. Today, the SAF’s Force Health is looked after by a robust medical system that is professionally governed and on par with national clinical standards and best practices.

Nonetheless, new challenges on the horizon mean that MMI and the Medical Corps will need to continue developing strategies to meet the SAF’s changing needs. This can best be achieved by leveraging on science and technology, embracing new ideas and strengthening collaborations with our national counterparts.

ENDNOTES


