

# 21<sup>st</sup> Century Healthcare for the Older Person

## Part 1

### MMA Health of the Older Person (HOP) Forum



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On 14 December 1990, the United Nations General Assembly (by resolution 45/106) designated 1 October as the International Day of Older Persons. The month of October generally hosts various activities in celebration of that day. As in previous years, the MMA through its Committee for the Health of the Older Person (HOP) had organised educative forums focusing on topics around the UN themes. 1 October 2017 aptly fell on a Sunday and with the theme "Stepping into the future: Tapping the talents, contributions and participation of older persons in society", the MMA HOP explored the objective of promoting and strengthening the participation of older persons in various aspects of social, cultural, economic and civic life with a focus on creating a pathway to support full and effective participation into old age, in accordance with older persons' basic rights, needs and preferences.

The fellowship gathering to get to know our 'partners-in-health' up close and personal was hosted by the MMA in partnership with the Grand Seasons Hotel, Kuala Lumpur under their Corporate Social Responsibility (CSR) activity – the venue together with the facilities, morning refreshments and lunch were graciously and complementarily provided by the hotel management – this gesture, repeated in the past two years, clearly reflects their commitment to work with the MMA on noble health-related causes. Microsoft (Malaysia) Sdn Bhd also gave a talk, as part of their CSR, where the topic covered innovations to help in disabilities and the participants were introduced to the marvels of coding in a game-like fashion.

Population ageing has been on the policy agenda for over a decade, and it will become a more important policy issue in the future. By 2030, the number of people aged 60 and above will exceed that of young people aged 15 to 24. Almost 700 million people are now over the age of 60. By 2050, two billion people, that is, over 20% of the world's population, will be 60 or older. The increase in the number of older people will be greatest and most rapid in the developing world, with Asia as the region with the largest number of older persons, and Africa facing the largest proportionate growth.

Malaysia has completed its demographic transition in less than four decades. Declining fertility and mortality

rates, together with increasing longevity, has resulted in a gradually ageing population for the country. Between 1970 and 2010, the age distribution of Malaysia's population has dramatically changed – the percentage of the population aged less than 20 years old has decreased by 18.3% from 55.6% in 1970 to 37.3% in 2010 while the elderly population (aged 60 years and above) has increased from 5.5-7.9%. By 2030, Malaysia will join the ranks of ageing nations when the elderly population is projected to reach 15% of the total population.

Attention to the particular needs and challenges faced by older people is clearly required. Just as important is the essential contribution the majority of older men and women can continue to make to the functioning of society if adequate enabling guarantees are put into place. Human rights lie at the core of all efforts in this regard.

Newsweek, 6 December 2004.

'Time was, old people knew their place ... sceptres were passed to sons and daughters, crowns placed on younger heads. The elderly would watch human follies from their rockers, grandchildren gambolling at their feet. Not anymore.

The elderly are no longer a sidelined sliver of society, but is its mainstream. During the next two generations, the number of the world's people older than 60 will quadruple ... so the dialogue has been going on for most of the last decade and a half when perhaps the baby-boomers were in charge ... having developed the tools to harness technology making the world more connected and more interdependent – we are poised to look at the solid issues to enable us to go into our twilight years with broadened horizons.'

As Malaysia becomes an ageing nation by 2030, this demographical transition of the population will also likely converge with climate change issues. Just imagine a crowded, aged, flat world amidst weather-related calamities ...

What may be required is a whole new way of thinking about an old idea. In essence, *TranSage* is an acronym from the MMA-HOP-Think City project on 'Transforming

a street to encompass a Society for all ages'. 'Tran-' means 'to move across or beyond' and 'Sage' describes a 'profoundly wise person', creatively paints a likely scenario of 'crossing over or moving into an age of wisdom'. Wisdom has traditionally been associated with the old and as a popular saying goes – 'the older a person becomes, the wiser they get'. Therefore, *TranSage* would literally mean 'heading into the future tapping on the wisdom of the years'. The time is indeed ripe to metaphorically look back over our shoulders and seek the 'wisdom of the years'.

New global realities and trends have emerged in the economic, social and demographic landscape over the past 15 years; online/in-person consultations at all levels are generating various options and scenarios for consideration. The MMA has strived to be part of the process, the MMA HOP presentation chose to focus on cyberspace as a notional environment to address issues related to the health of older persons. The internet is a massive networking infrastructure that connects millions together globally, and it has revolutionised communications, to the extent that it is now our preferred medium of communication today, with just one click of our smartphones, iPads, laptops or computers, we can access almost anything virtually through the help of the internet.

This new ecosystem is fast replacing our mundane world. Everything that we did with our arms and legs, or through the non-verbal use of our senses, is now being done virtually online. So either we pull the plug and go offline and back to reality (so to speak) or we stay online and become a species that thrives and exists in virtual reality. It is up to us to decide the dialogue, as it continues to unfold, is a meandering journey that has taken us to the verge of innovating on an idea to address our lasting concern, which is, health for all!

Although we function well in the "physical or natural world", more and more we are witnessing a virtual world which may be just as real. The meaning of the word virtual in a computer sense means "not physically existing but made to appear by software"; this has been attested from 1959. Virtual events are being used to deliver presentations, trainings, meetings and sessions led by stakeholders. It can also refer to aspects of an event that are brought to users through an online experience.

A virtual world is a computer-based online community environment that is designed and shared by individuals so that they can interact in a custom-built, simulated world. Users interact with one another in this simulated world using text-based, two-dimensional or three-dimensional graphical models called avatars. But before we go into the technicalities of creating a virtual world, we need to discuss the issues and reasons why we should consider leap-frogging from the real to the virtual world. The first issue is proper, adequate and affordable healthcare through: positive medical interventions; advanced medical technology; and improved standards of living, nutrition, education, hygiene and housing.

The World Health Organization's (WHO) report on 'Telemedicine: Opportunities and developments in member states' acknowledges that information and communication technologies have great potential to address some of the challenges met in both developed and developing countries in providing accessible, cost effective high quality healthcare services. Telemedicine/telehealth use ICTs to overcome geographical barriers and increase access to healthcare services which is particularly beneficial for rural/underserved communities in developing countries

– groups that traditionally suffer from lack of access to healthcare.

The second issue is on income-generating opportunities: the concept of compulsory retirement need to be addressed; so also financial security; gainful employment and biases against age, gender, etc.

The third issue is on quality of life (QoL) where it is imperative that the living environment should be clean, hygienic, stress-free and the state of well-being must holistically address not only the physical and mental components but also the social, cultural, emotional and spiritual facets of life. For physical and emotional well-being to thrive, it is essential to access recreational facilities, family-care and community-harmony.

To enhance social and mental well-being, it may serve well to look at educational facilities that need not be externally organised to imbibe the characteristics of a life-long learner who has an inquiring mind, a helicopter vision, information literacy, a sense of personal agency, and a repertoire of learning skills. Life-long learning opportunities create a versatile age where there is no barrier to learning and opportunities for mental, physical and spiritual stimulation.

UNESCO defines life-long learning as: lasting one's whole life; has systemic acquisition; is self-fulfilling; generates ability and motivation; and it may be formal, non-formal and informal. Intergenerational initiatives could perhaps blend the experiences of the older persons with the talents of the younger generation which will surely foster a society for all ages while doing away with redundancy altogether through embracing the UN principles for older persons: independence, participation, care, self-fulfilment and dignity (UN resolution 46/91: 1991).

The MMA's past activities towards developing strategies for the Health of Older Persons span over decades. Each time the baton is passed, the MMA continues to 'walk-the-talk' and we invite each one to take that meandering walk with us. As a fraternity, we will take a collegial view of everyone's ideas and aspirations. It is timely to reflect on the MMA "Senior Citizen's Charter" that was launched on 28 May 2005 at the 45th AGM in Melaka where it re-affirms that the Older Person has a right to:

- safe shelter, proper healthcare and income-generating opportunities that are elderly-friendly;
- clean, hygienic, stress-free environment and adequate nourishment that promote a healthy quality of life;
- recreational facilities, family-care and community-harmony that promote physical and emotional well-being;
- educational facilities and life-long learning opportunities that promote social and mental well-being; and
- intergenerational initiatives to blend the experiences of older persons and the talents of the younger generation to promote a society for all ages.

It would also be apt to ponder on the timeless WHO Brasilia declaration (1996) that states: "Ageing is a development issue. Healthy older persons are a resource for their families, their communities and the economy."

References/sources: many articles are cited throughout the weaving of this narrative that has enhanced the writing of the text and the author shall gladly share the repository with anyone who wishes to read further on the subject matter.

Part 2 of this article is by invitation to a friend of the MMA, Ms Anita Navaratnam from Helsinki, Finland, as a potential collaborator to the MMA HOP.



## Part 2

# Digitalisation of Healthcare: Trends, Threats and Opportunities in Malaysian Healthcare



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The advancement in medical research, improvements in public health and general living conditions are catalysts for the growth in the elderly population. According to the UN forecast, the population age 80s and above are the highest growth population within the elderly segment. Among today's young people, survival to the age of 80 is expected to be a norm (with the exception of Africa) globally. However, they do not age healthy. One in five persons within this category will develop dementia. With populations that live longer and coupled with increasing lifestyle-induced diseases, the Malaysian healthcare system will not be able to cope to address their needs.

Healthcare costs for are expected to rise ten folds in the next 20 years in Malaysia. As treatments become more expensive, Malaysia will need to invest in preventative health measures as well as find more efficient ways of delivering care for the population.

The role of both private and public practitioners will need to evolve to meet unmet medical needs of the general population. Instead of disease management, healthcare professionals will need to help their clients live a meaningful life. In western countries, we start to see healthcare moving from treating ill-health to focus on improving wellness and well-being.

Healthcare providers (HCP) in these countries are investing more in preventative measures to keep their patients healthy. Increasingly, public health institutions in US and the EU are investing in digital tools to move the burden of care from hospitals to home. Governments are investing in smart cities to build more efficiency in the systems towards creating healthy population. Even terminologies are changing to adapt to the needs; patients are now referred to as consumers and hospitals will very soon be called health-coaching centres.

In order to understand the changes that will shape the future demand of healthcare, we have compiled and selected five key global trends that are starting to make inroads in healthcare. We believe they will become mainstream adoption in Malaysia in the near future. Some of these trends could both pose a threat as well as an opportunity for the industry.

### Key trend 1

#### Growth of Non-Traditional Players Entering the Health Ecosystem

Healthcare happens in neighbourhoods and other touch points and not in clinical settings. Consumers are demanding solutions that are convenient and customised from healthcare. With the introduction of IOT (Internet of Things), interconnectedness is made easier. Coupled with A.I., individual as well as population data becomes an attractive proposition for non-traditional players to invest and monetise healthcare.

In the US and Europe, there are already new entrants and investments in the healthcare systems such as consumer goods companies, tech companies, sporting, car manufacturers, etc. These players are starting to address customer expectations on wellness.

### Key trend 2

#### Changing Family Dynamics

Traditional family structures are changing due to globalisation. Close family members migrate to different cities, countries and continents. This means that we will see less caregivers for senior citizens.

In Malaysia, as younger people move to urban areas, living spaces are limited which translates to limited spaces to care for their relatives. However, on the positive side, we also see a growing number of senior citizens also opting to live independently on their own in Malaysia.

### Key trend 3

#### Food Science & Nutrition

With unpredictable weather patterns, we will start to see scarcity and high prices for fresh food. Alternative sources of healthy food will be sought. The plant based meat products have started to enter the market and is set to reach USD 5.2 billion by 2020 and will slowly replace fresh meat products.

Alternative initiatives such as food as medicine are starting to grow in popularity in the west due to a conscious shift for natural healing. Increasingly, healthcare professionals

are also starting to make food planning and nutritional counselling a formal part of the treatment plan.

#### Key trend 4

### Patient Empowerment

Patients are now able to self-diagnose their symptoms with sites like WebMD as well as share their real-time health information as in PatientsLikeMe site. Patients are increasingly taking charge of their own healthcare and want a dialogue with their physicians on their treatment plans.

#### Key trend 5

### Consumerisation of Healthcare

With the digitalisation of healthcare, consumers will expect healthcare to replicate existing online services in the near future. They will start to demand healthcare anywhere, anytime with a click of a button.

The above trends showcase the environmental as well as social changes that will shape the delivery of care in the near future. Consumers are ready to embrace the change in healthcare. If the HCPs don't act soon, other players will enter and control the ecosystem.

Based on the trends and insight gathered above, we will examine opportunities and concepts that the HCPs can examine and consider implementing today. We have used senior citizens as an example to showcase how some of these concepts could work concretely in Malaysia.

### Rich Data & Predictive Analytics for Better Health Outcomes

Social Determinants of Health (SDOH) account for 60% of premature deaths in the US. Combining data that includes, health, social, economic and environmental information will provide better insights in terms of treatment and prevention programs.

Social isolation, loneliness and social exclusion are risk factors for senior citizens. Depression among older people is currently under diagnosed. By linking healthcare to broader social needs, HCPs would be able to provide the appropriate care (including non-medical treatment) towards their patients at the right time.

Data-rich information will assist physicians to invest in the right type of intervention & preventative measures for their patients. For example, with the right analytics, physicians can predict diabetic patients who are at high risk to develop PAD over time. With this information, both the physician and the patient can work on active monitoring or delaying the onset of the disease. This will lead to better health outcomes as well as provide a higher quality of life for the patients.

### Building Sustainable Patient Engagement Platforms

In Malaysia, consumers have a vast choice of HCPs. Today, choices are made based on location, reputation, cost and services provided. As patients are empowered on their health and choices available, they want to be engaged in the management of the health. In the near future they expect their physicians to serve them anytime, anywhere and this would be a key criterion for their healthcare choice.

The biggest stress today among the elderly population in Malaysia is access to healthcare. Their concerns include transportation, appointments, getting to see the right physician and picking up/filling their prescription. As caregivers for the elderly start to dwindle, they would need a more convenient and efficient ways to access healthcare.

Telemedicine is a growing platform with revenue of over USD4 billion today. With telemedicine, advanced mobile imaging and digital remote monitoring tools, physicians can provide suitable engagement required by their patients. However, these digital tools need to fit seamlessly in the patients' life for it to produce the right results. For example, telemedicine can be used for monitoring post-surgical patients at home where constant monitoring is needed. The patient can stay comfortably at home while all their vital signs as well as images are being sent and monitored remotely.

There are cases of physicians monitoring their elderly patients post-surgery via text messages if technology is out of reach for some of these patients. The need is to alleviate the stress of accessing their HCP while coping to recover from surgery as well as having the confidence of managing their own care. Digital tools can help do this.

### Extended Care Management Team

With growing consumerisation of healthcare, physicians will need to start providing non-traditional healthcare services towards their clients such as nutritional support, exercise classes, life coaching, home improvement for healthy living, etc. to stay competitive.

In order to design and provide relevant products and services, HCPs will need to reach out to other partners within and outside the ecosystem. For example, in the US, there are clinics that utilise healthcare coaches as the first interface to their incoming clients. Once a thorough assessment is done, only then the clients are referred to the right care team member of which are either medical or non-medical professionals. In another example, primary care physicians are also providing cooking lessons as well as aiding grocery shopping as part of their services. Although some of these services seem non-traditional health services but they do lead to better health outcomes.

The healthcare ecosystem is ripe for change. The change is now. Many institutions globally are starting to fully digitalise their enterprise for higher efficiency in their operations. Hospitals are also investing in innovation office and test beds to co-create products and solution with tech start-ups. The mindsets of healthcare professionals are also adapting towards a forward-looking approach in care delivery.

The tech savvy generation in Malaysia will grow old, retire later, and lead independent and productive lifestyles. As they live longer, they will demand and seek products and services that would improve their quality of life. Studies have shown that older patients (over 50) want to use digital healthcare services as much as younger patients. Our current bias and prejudice toward senior citizens needs to shift if we want to cater towards their needs. As we grow older, we deserve to thrive in society and lead meaningful lives independent of our age.