

A perspective of
future healthcare landscape
in ASEAN and Singapore



Economic prosperity, aging population, the growing middle income population and sensitive public policy are key demand drivers of better healthcare and infrastructure. This will ultimately manifest in a gradual but undeniable shift in health outcomes of the population together with the related areas of the healthcare ecosystem.

Minister for Health Singapore, Mr Gan Kim Yong

What we know in ASEAN today and estimate tomorrow

A sad reality: "Health is a striking example where least progress has been made in Asia, despite the high economic growth and great success in poverty reduction"¹



Average life expectancy in ASEAN countries in 2012 was **73 YEARS**, an increase of **8 years** since **1990**: **Singapore** achieves the highest with **83**, and **Laos** and Myanmar the lowest with **66**. **Cambodia** experienced the largest increase by **18 years to 77**¹



Health expenditure per capita in **ASEAN** is around **4%** of **GDP** - as compared to the **OCED** average of **9.5%** - despite the ASEAN health expenditure increase by **250%** between 1998 and 2010 to over USD 68bn



Growth in average annual **healthcare** spending between 2014-18 is expected to be around **11%** of **GDP** in **ASEAN** - but with highly varied rates among the countries: **Vietnam** with the highest at **6.6%** and **Myanmar** with the lowest at **1.8%**. The combined public and private healthcare spending greatly varies: In 2012 average spend of **USD443** in **ASEAN** with **USD2,426** in **Singapore** and **USD20** in **Myanmar**. Government Healthcare spend in **ASEAN** **6.7%** of **GDP** compared to **OECS** average **17.2%**²



Generics will take a larger share of pharma-emerging markets medicine spend and will increase from **58%** in 2012 to **63%** in 2017 compared to global increase from **27%** (**USD261bn**) to **36%** (**USD421bn**) during that period



Meet the over 65s in ASEAN – by 2020 they will number 46 million – **7.8%** of **ASEAN Population** – one in every³:
6 Singaporeans
14 Indonesians
26 Laotians

Nurture the under 14-year-olds – 26% of ASEAN's population in 2013 with ongoing decline through 2020. Lowest rate in **Singapore (16%)**, highest rates in **Philippines** and **Laos (34, 35%)**⁴



Chronic diseases due to sedentary lifestyles are becoming more prevalent as ASEAN nations get richer: **Type 2 diabetes**, and **obesity** - over **190mil** with diabetes in Asia Pacific - however pain, antibiotics and hypertension still dominate developing markets



Cardiovascular diseases are predominant concern in **ASIA** because of **tobacco**, **hypertension** and **obesity** - Asia Pacific will have greatest number of **NCD** (non-communicable diseases) deaths among all global regions by 2020⁵

Communicable diseases, like TB/HIV, are still highly prevalent in ASEAN countries - Cambodia 400 cases in every **100,000** population in 2013 compared to ASEAN average of 190



Inexpensive medical devices, such as **prosthetic** and **diagnostic tools** are researched and manufactured in the region for the region

Sources:

1. Life expectancy data, WHO <http://apps.who.int/gho/data/node.main.688?lang=eng>

2. Medicines Outlook through 2017 IMS Institute for healthcare informatics <http://www.pharmaasia.com/article/frost-sullivan-indonesia-one-of-more-attractive-markets-in-asean-for-foreign-healthcare-cos/10568>

3. Aging in ASEAN http://www.aseanaffairs.com/asean_analysis_21_june_2010/ageing_in_asean_window_of_opportunity Health in the Post-2015 Development Agenda for Asia and the Pacific, ADB September 2013

4. <http://data.worldbank.org/indicator/SP.POP.0014.TO.ZS/countries?display=default>

5. Footnote: Health in the Post-2015 Development Agenda for Asia and the Pacific, ADB September 2013

Healthcare landscape outlook - Southeast Asia

A raft of healthcare Private Equity (PE) activity is demonstrating the increasing importance of the SEA health care sector, with Singapore, Malaysia, Vietnam, and Thailand coming in top for recent deals by geographies. Hospital-based businesses (general medical and surgical facilities) were the main focus of deal activities, accounting for 60 percent of transactions during 2004-2013.¹⁰

Healthcare demand in Southeast Asia (SEA) is increasing rapidly, driven by population growth rates that are expected to outstrip those of other geographies, and an epidemiological shift from infectious diseases to a chronic disease pattern matching western markets.

Most of SEA's spending on healthcare comes from the public sector (sometimes augmented by state-run insurance funds and personal expenditures), and many of the region's fiscally constrained governments are finding it challenging to meet their citizens' escalating needs, as evidenced by a sampling of countries' current and projected healthcare spending patterns.

In Malaysia, estimated healthcare spending was equivalent to 4.4 percent of GDP in 2013. That proportion is expected to rise slightly, to 4.5 percent, by 2018 as growth outpaces economic expansion. In dollar terms, the nation's healthcare is projected to rise by an average of 10.5 percent a year, growing from an estimated \$13.7 billion to \$22.9 billion by 2018⁶. Continued spending growth will help to offset demand, as Malaysia's elderly increase in number, continued urbanisation spawns western lifestyle diseases, consumer awareness of healthcare services grows, and access to these services is improved.⁷

Spending on healthcare in Singapore is relatively low as a proportion of GDP, at an estimated 3.9 percent in 2013, and is projected to remain stable in 2014-2018⁸. The recent budget announcement on 5th March 2015 highlighted that 11 percent of the S\$75.9 billion in government expenditure is dedicated to healthcare in 2015 and the city state's total healthcare spending during the period is estimated to rise 8.9 percent annually. Unlike many of its neighbours, most of Singapore's spending on healthcare comes from private-sector savings and state-run insurance funds, although direct government spending on healthcare has risen sharply in recent years.⁹

⁶Industry Report, Healthcare: Malaysia, Economist Intelligence Unit, April 2014

⁷Ibid

⁸Industry Report, Healthcare: Singapore, Economist Intelligence Unit, July 2014

⁹Ibid

¹⁰Thomson Banker, Al Masah Capital Research

While the level of per-head healthcare spending in the Philippines is one of the lowest among the SEA's major economies, spending as a proportion of GDP, at 4.6 percent in 2013, is similar¹¹. Because of weak public financing, however, that share is likely to dip to 4.5 percent by 2018¹².

Meanwhile, spending growth is projected to average 8.0 percent annually, increasing from an estimated \$12.5 billion in 2013 to \$20.0 billion in 2018. The Filipino government has promised to respond to the growing need to improve healthcare coverage, and this promise came one step closer to reality with the 2013 passage into law of the Universal Healthcare Bill, which promises health insurance for all Filipinos, especially the very poor.

At an estimated 3.3 percent of GDP in 2013, Thailand spends proportionately less on healthcare than the Philippines, Malaysia or Singapore, but more than Indonesia (at 2.8 percent in 2013)¹³. Thailand's healthcare spending is estimated to rise by 8.0 percent a year in 2014-2018 to reach \$18.7 billion, up from an estimated \$12.8 billion in 2013. Thailand's healthcare system continues to struggle to meet demand following the 2001 introduction of a universal healthcare system. However, because the government is working to reduce a budget deficit, healthcare's share of GDP is expected to remain flat, despite population growth and rising demand.¹⁴

Many of the economies in SEA are struggling with a relatively underdeveloped public healthcare system. The region has a chronic shortage of medical personnel: the average number of physicians in SEA is 0.6 per 1,000, lower than that in developed economies such as the UK (2.8), Germany (3.7), and the U.S. (2.4). Additionally, the number of dentists and nursing and midwifery personnel is much lower than that in developed economies.

Indonesia's situation is representative of SEA's personnel shortage. The country has only 0.2 doctors per 1,000 people. From an infrastructure perspective, Indonesia has only 0.6 hospital beds per 1,000 population when compared to the global average (three beds per 1,000 population) and that in OECD countries (five beds per 1,000 population).¹⁵

While much of SEA's public healthcare sector struggles with growth and funding issues, the region's private healthcare market continues to enjoy solid growth, especially in the more developed areas such as Singapore, Malaysia, and Thailand. Major players in these geographies offer world-class services to both local and international. Building on the reputation of Singapore's healthcare services, which has been bolstered by the city state's growing clinical-research and biomedical industries, the government is promoting its healthcare industry as a regional center of excellence for general surgery and medicine and specialist services, including cardiology and organ transplants.¹⁶

The SEA region has an active medical tourism industry, due to its balance of quality and advanced medical care/technology and relatively affordable cost compared to the rest of the developed nations. This is why less-developed countries like Indonesia lose a significant share of their domestic healthcare market spending; Indonesian residents travel to neighboring countries like Singapore and Malaysia to seek medical treatment — nearly 1.5 million Indonesians comprise overall medical tourism numbers, with a corresponding outflow of \$1.4 billion yearly.¹⁷

The lack of qualified medical personnel will continue to be a barrier as these SEA economies continue to struggle despite their increasing healthcare spending.

¹¹Industry Report, Healthcare: Philippines, Economist Intelligence Unit, June 2014

¹²Ibid

¹³Industry Report, Healthcare: Thailand, Economist Intelligence Unit, April 2014

¹⁴Ibid

¹⁵World Health Organization, World Health Statistics 2013

¹⁶Industry Report, Healthcare: Singapore, Economist Intelligence Unit, July 2014

¹⁷The Association of Indonesian Tour and Travel Agencies

Healthcare landscape outlook - Singapore

Circa 2010 – Healthcare issues faced by the community¹⁸

Singapore has received many accolades for its achievements in many spheres. Some visitors (and even residents) believe there is no poverty in Singapore. But to give some perspective, below is a list of ten healthcare issues - a list that is by no means exhaustive:

1. Ageing population – Singapore is one of the fastest ageing populations in the world. Long term care is a problem and the country could potentially face a dementia tsunami. Care givers are under stress caring for the frail and ill elderly. Many elderly also face social exclusion, emotional and physical abuse, and neglect. If unaddressed, financial inadequacy is likely to be a serious problem for many elderly and their families.

2. Primary healthcare – With world class tertiary healthcare, Singapore is excellent at keeping people alive. Keeping them alive yes - but keeping them well? Singapore can do a lot better at preventive healthcare and the prevention of chronic diseases. However, this is an unglamorous area of work, and outcomes tend to be very long term. Many stakeholders need to be involved, and they need to work together to provide integrated care.

3. Family/youth at risk – Families and youths are under a lot of stress from issues such as small and dual income families, rising marital problems and increased work/life tension among others. Divorce has been on the rise for a long time. Parents need help as they often do not have the capacity to deal with their personal and family issues. The prevailing negative environment and prolonged levels of increased stress will in the long run lead to higher risk of future health complications. Youths need better guidance and role-models, and to engage in meaningful activities.

4. Treatment of migrants – Singapore cannot afford to ignore a quarter of the total population. Most migrants are workers who have played an important role in ensuring the economic success of Singapore and in bringing wealth to Singaporeans. But many migrant workers are subject to sub-standard living environments and poor working conditions. Foreign workforce health status needs to be carefully monitored or national productivity will suffer and disease transmission patterns may change for the worse.

5. Mentally ill – Compared to other social issues in Singapore, this is a relatively neglected area. The Ministry of Health estimates that 1 in 6 Singaporeans suffer from some form of mental health problem. There is unwillingness for them and their family members to seek professional help. With smaller families, it is becoming harder for families to cope financially with caring for persons with severe mental illness. More early assessment and intervention mechanisms are needed.

6. Employment of disabled – Employment for the disabled appears to be one of the greatest bottlenecks in the continuum of services for the disabled. How can Singapore integrate more of our disabled residents into the mainstream? It has also been estimated that 80% of disabled persons can lead independent lives, but few receive adequate early intervention and special education when young.

7. Social capital – There are a lot of opportunities for mutual self-help and community bonding/volunteerism that can greatly improve the quality of lives of Singaporeans. However, social ties are weak in Singapore and households tend to live in self-contained isolation from their neighbours. How do we change cultural norms in Singapore to improve both bonding and bridging social capital? This, we believe, will in turn create healthier living environments and a positively cohesive community for the population.

¹⁸ <https://www.sggives.org>

8. Impact of economic restructuring – Singapore continues to feel the effect of globalisation and economic restructuring. This means that more Singaporeans, without relevant job skills, would face stagnating real wages, increasing job insecurity and a higher risk of becoming structurally unemployed. This would put more Singaporeans and their families under duress. Social cohesion, due to increasing income inequality, may also come under strain. A potential knock-on effect of this would be that the overall cost of healthcare will continue to be on a rise and result in poorer accessibility.

9. Singapore's quest to be a Renaissance City – Millions of dollars have been ploughed into Singapore's quest to become a creative and vibrant Renaissance City since 2003. Arts and innovation promotion and development is part of Singapore's attempt to develop a creative economy so that Singapore would remain competitive globally. On the Healthcare front, many local medical institutions are already recognised in the region as leading referral centres for advanced medical treatment with impeccable standards of care. At the same time these very same institutions should remain grounded in the fact that they have a responsibility to serve the health care needs of the local population as a prevailing priority.

10. The Environment – "Everyday, some species of flora and fauna will become extinct. The deserts are expanding. Our oceans are becoming more polluted. Fish stocks are being overexploited. Many cities are turning into slums and are being strangled by traffic congestion." – A quote from esteemed Singaporean Professor Tommy Koh. How can Singapore mobilise key stakeholders to reach out to its people to care and protect the environment? Many take for granted environment health issues as standard of living is at a higher level compared to other nations whom have gone through a similar journey of rapid economic development but looking ahead, it is unwise to think that Singapore is excluded from the looming environmental issues becoming more and more significant affecting the world at large.

Circa 2013 – The Singapore Conversation

The IPS (Institute of Policy Studies) conducted door to door survey involving 4000 participants. The survey findings had "a lot of common points". Further with the views gathered from the 660 OSC (Our Singapore Conversation) sessions conducted between Oct 2, 2012 and July 15, 2013, involving 47,000 Singaporeans, 5 key themes were identified:

1. Assurance, peace of mind;
2. Opportunities;
3. Purpose;
4. Spirit; and
5. Trust.

These 5 themes are key words in the risk agenda and will be crucial in helping to shape the future of Singapore's public policies for health care. In the 2014 National Day Rally, Prime Minister Lee Hsien Loong said "Let this belief and spirit burn bright in each one of us, and guide us forward for another 50 years and more. Together, let us be the pioneers of our generation. Together, let us create a better future for all Singaporeans". It is pertinent that this forward thinking and plans for the future of healthcare will extend beyond SG50.

Circa 2014/2015 – A turning point in Singapore healthcare¹⁹

Few would dispute that healthcare is one of the biggest challenges facing Singapore in the next 50 years. These are some of the initiatives that will be put in place to ensure that all Singaporeans, especially the elderly will be well taken care of:

Medishield Life

- Building a more inclusive and caring society through the introduction of Medishield Life to provide a more comprehensive healthcare protection for all Singaporeans.

Pioneer Generation Package

- Singapore recognises the tremendous debt owed to the generation that built modern Singapore.
- The pioneer generation package is introduced to provide benefits such as outpatient care, medisave top ups and disability assistance to these pioneers.

Home Palliative Care financing

- There is a change in the way Ministry of Health reimburses home palliative care providers.
- This added trust in providers to do the right thing constitutes to a paradigm shift from existing model.

Emergency care in private hospitals

- Some private hospitals will begin to support the Singapore Civil Defence Force's ambulance emergency patients under a subsidised healthcare scheme
- Patients will now pay rates similar to those of public hospitals.

Better healthcare accessibility

- Community Health Assist Scheme (CHAS) allows the lower income Singaporeans to be treated inexpensively by private General Practitioners (with Government subsidising the difference). This opens the door to more partnerships in primary healthcare.

Some key points highlighted at the Prime Minister's National Day Rally speech that we should all take note of include:

Appreciating the pioneer generation

- Recognising past contributions.

Achieving our potential

- Training talents – well-trained, can-do and productive.

ASPIRE Committee

- Tripartite committee – government, employers and the individual
- Assurance in retirement - Central Provident Fund (savings) and home ownership (a home for all ages) are twin pillars of retirement adequacy.

Transforming Jurong

- Making every corner of Singapore an outstanding living environment for all.

Believing in Singapore

- The power of the human spirit - having the belief that whatever the challenges of this uncertain world, Singaporeans can thrive and prosper as one united nation.

¹⁹ Today paper, Dr. Jeremy Lim, 30 December 2014

Ten predictions and their strategic insights on the healthcare ecosystem

External environment shaping predictions

	Strategic Risks
<p>1 Health Consumers Informed and demanding patients are now partners in their own healthcare</p>	Allowing too much consumer autonomy potentially undermines professionalism of the medical fraternity (becomes too much of a service industry)
<p>2 Healthcare delivery systems The era of digitised medicine - new business models drive new ideas</p>	Investment into digital/technology might not bring about significantly better health outcomes as anticipated
<p>3 Wearable and mHealth applications Measuring quality of life not just clinical indicators</p>	Accuracy and authenticity of readings from wearable devices potentially questionable and the importance to determining identity becomes paramount. Potential risk of abuse by irresponsible parties
<p>4 Big Data in 2020 Health data is pervasive - requiring new tools and provider models</p>	Data privacy and security issues become even more significant and ownership claims on personal data versus organisational data become more complex
<p>5 Regulatory compliance and patient safety Regulations reflect the convergence of technology and science</p>	Regulators having to fine tune the balance between protective (healthcare quality and patient safety safeguards) versus protectionism (political and nationalistic agenda) stance to allow for real world progress in healthcare

Internal Industry performance shaping predictions

	Strategic Risks
<p>1 Research and development The networked laboratory - partnerships and big data amidst new scrutiny</p>	Complex arrangement of IP ownership structure potentially give rise to legal tussles between members of the partnership
<p>2 The pharmaceutical commercial model Local is important but with a shift from volume to value</p>	Failure to transition from volume to value business model will negatively impact business viability in unforgiving and highly competitive market environment
<p>3 Measurable and mHealth applications Single, global organisation responsible for insight enablement</p>	Inevitably requires significant investment (money/time/manpower) to reconfigure/setup centralised resource
<p>4 New business models in emerging markets Health data is pervasive - requiring new tools and provider models</p>	Potential unreliability of data in relation to emerging market sources
<p>5 Impact of behaviors on corporate reputation A new dawn of trust</p>	Mismanagement of reputation risk issues can have negative long-term effects on brand value

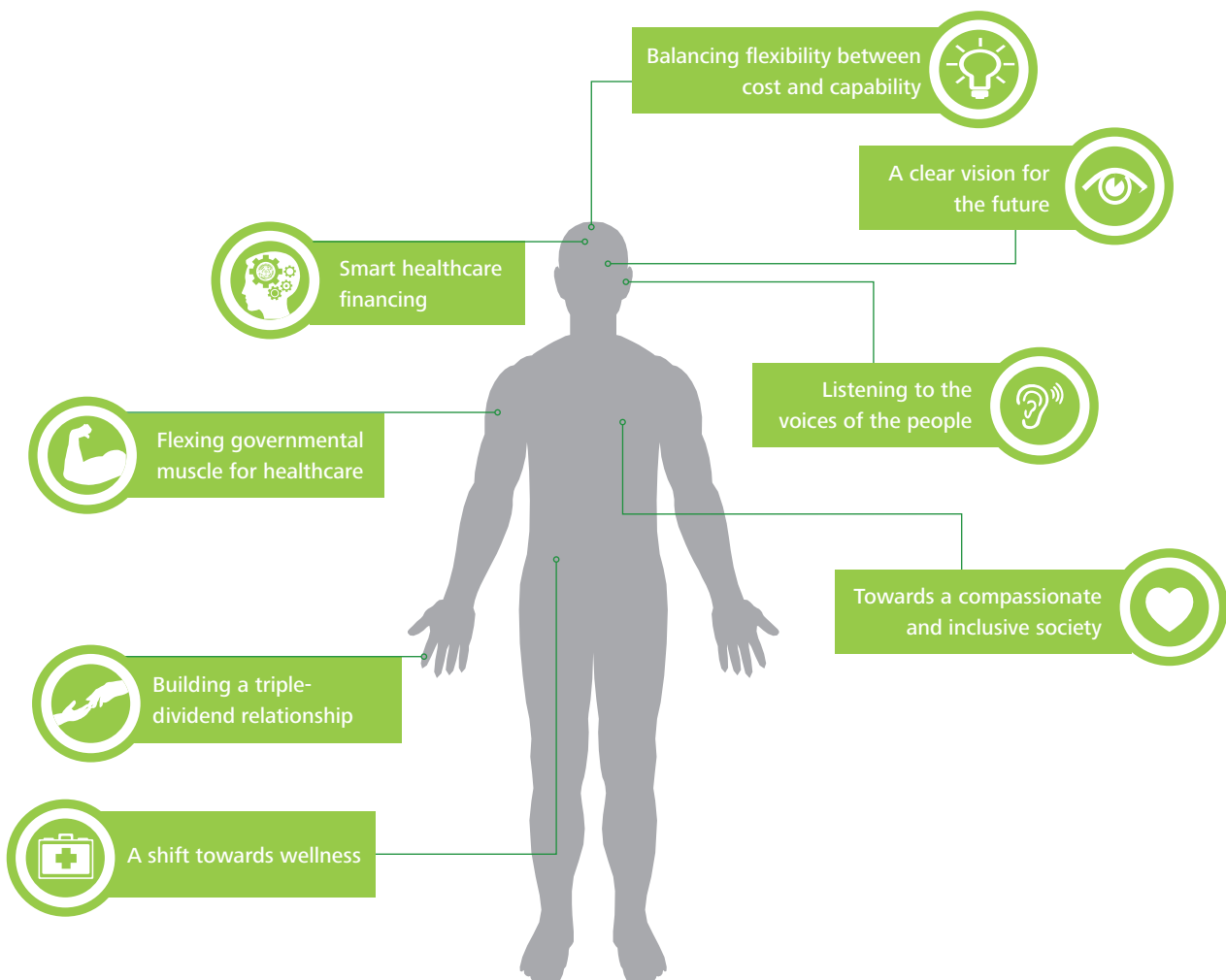
The Deloitte Future Healthcare 3.0 model

As we look beyond the current into the future, we find that the impending systemic changes in our daily human behaviour will undoubtedly influence the changing lifestyle of our society. Economic prosperity, aging population, the growing middle income population and sensitive public policy are key demand drivers of better healthcare and infrastructure. This will ultimately manifest in a gradual but undeniable shift in health

outcomes of the population together with the related areas of the healthcare ecosystem.

With these probable insights of the future, we propose the development and adoption of the following 8 future healthcare strategies in our Deloitte Future Healthcare 3.0+ model.

The Deloitte Future Healthcare 3.0+ model



A clear vision for the future

Businesses and resource planners alike should pay heed to the rise of megatrends and the increasingly rapid pace of disruptive technologies that affect baseline norms within the healthcare industry. As capacities and practice mindsets are often slow to change, there is a risk of demand-supply mismatch.

This is particularly of paramount importance in developed economies such as Singapore. With today's permeability of information, prevalence and reach of social media, and ongoing rapid spread of technological advancement via the globalisation movement, economies are currently undergoing the process of unprecedented growth and evolution. Even the emerging economies will experience a "fast-forward" effect in the form of sudden affluence as well as changes in lifestyle and diet. This will in turn result in a shift in the baseline disease patterns and subsequent downstream healthcare demand. Consequently, there is a significant risk of the respective healthcare systems becoming overloaded and unable to cope due to the lack of foresight planning and unpreparedness.

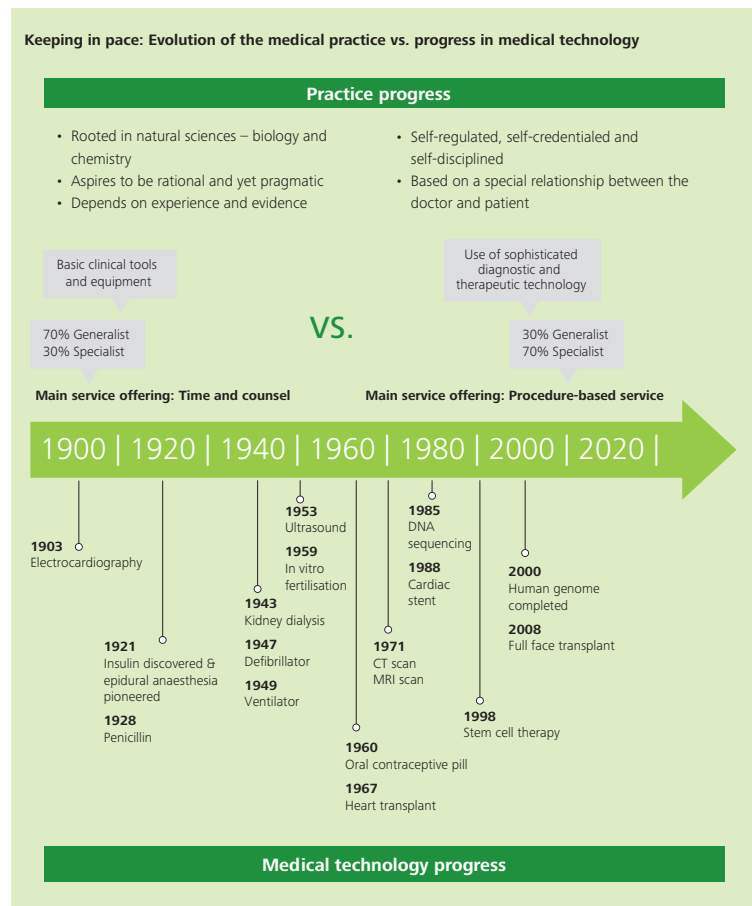
A clear vision of the future will play an important role in helping the governments and various healthcare providers in planning ahead and mitigating the potential risks and issues as a result of these megatrends impacting the healthcare ecosystem.

Smart healthcare financing

With the challenge of evolving and growing healthcare demands set before us, there is a huge ongoing effort to review the financing mechanisms that are currently in place or potentially available to fund current or future healthcare systems.

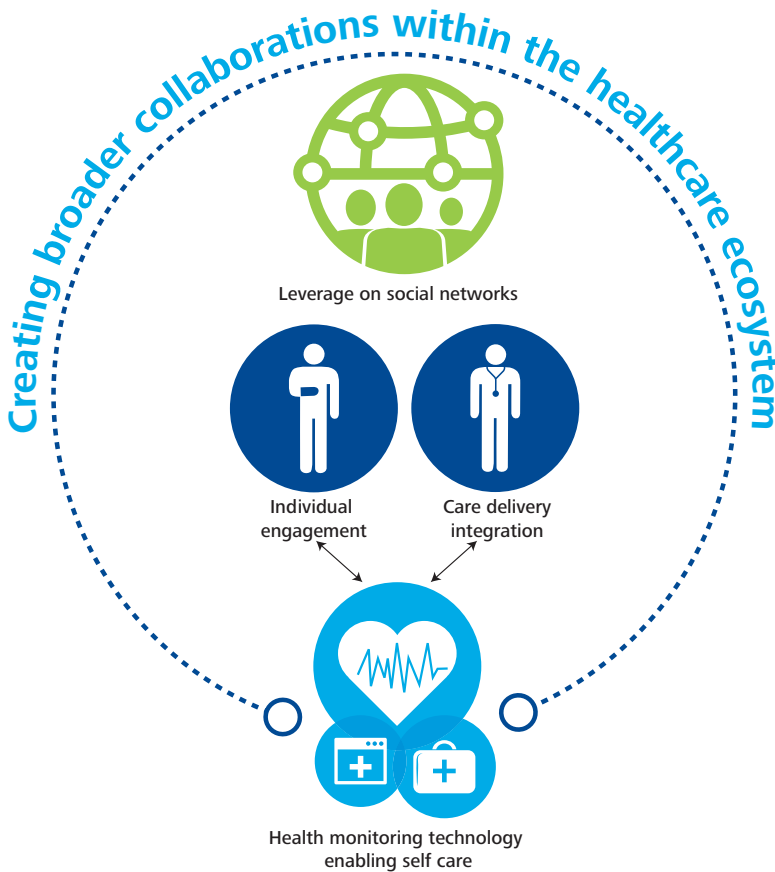
A review of healthcare financing mechanisms that are currently in place in a majority of economically mature geographies reveal that the common issues faced are unsurprisingly cost containment of the spiralling healthcare costs and the comprehensiveness (or lack thereof) of coverage.

While there is no universally correct one-size-fits-all model, the smart approach would be along the lines of an adaptable, mixed financing model with segmentation capability in terms of level of coverage, population demographic profile and healthcare accessibility.



Having said that, there is a realistic need to state that the challenge lies in the implementation and administration of this idealised mechanism in a fair and equitable manner which many countries may not have the capacity to undertake.

Moreover, any outright change in financing mechanisms will be met with opposition, particularly in countries with aging populations. It will be challenging to try to enforce a different financial mechanism such as mandatory health savings or a co-funding approach for healthcare benefits after decades of generous social insurance and subsidies.



Listening to the voices of the people

With reference to the Consumer-Patient archetype, the role of social media is becoming increasingly dominant in the realm of healthcare. The implications of this are not only limited to an information dissemination or marketing standpoint. In fact, it requires a more interactive and better understanding of patient behaviour and values. Consequently, more can be done in terms of influencing lifestyle choices and in encouraging healthier behaviours.

Given that the upcoming challenge of rising treatment costs due to chronic diseases is one that health systems must find effective ways to deal with, a new patient centred approach is likely to improve the odds of success. It also involves a greater understanding of a redesigned paradigm for understanding and influencing patient behaviour.

Five key components of the paradigm:

- Use insights from behavioural studies (psychology and economics) to increase individual engagement in health matters;
- Integrate behaviour change as a core component within new healthcare delivery models;
- Leverage the power of influencers and social networks to support and drive health behaviour change;
- Adopt remote monitoring and self-care technologies to support and empower individuals and establish linkages to clinicians and influencers; and
- Encourage multi-stakeholder involvement which includes public and private sector partnerships across the healthcare ecosystem.

Building a triple-dividend relationship

With many moving parts in the system, it is often easy to forget that the healthcare industry is essentially dependent on the skilled staff and medical professionals who collectively drive the whole patient experience from the start to end. They are the custodians of a health organisation's brand and reputation. Manpower issues will continue to occupy the agenda of the day but emerging ones such as career mobility and equality have to be dealt with promptly.

As more medical professionals demand career mobility and markets become more integrated, the healthcare ecosystem will be facing stiffer competition for healthcare professionals. As it is, countries like Singapore and Malaysia are transit countries for foreign nurses seeking further migration to end destination countries and this has created staffing gaps in the respective health systems.

A long term goal is to work towards building a tripartite system anchored upon a triple-dividend relationship (win-win-win) between the healthcare industry (employer), healthcare worker and consumer (patient). This will go a long way to ensure the health and vitality of the entire healthcare ecosystem, and ensuring a continued evolution of the quality of the overall healthcare experience.

Towards a compassionate and inclusive society

As global healthcare demand shifts from the initial predominant focus on acute care to an intermediate and long-term care model, the healthcare system will serve not only chronic disease patients but also a subset of the elderly population. This would encompass therapeutic services as well as social support mechanisms and welfare. Indeed, the 'care' component of 'healthcare' will become more pronounced and this has to be reflected in the overall approach.

It is arguable that efforts toward achieving a societal goal of inclusivity extend beyond the discussion of healthcare. However, at the same, it is an undeniable fact that any pragmatic and enlightened approach will have to include the health system in the equation.

With the cost of healthcare escalating rapidly, it is also inevitable that a proportion of the younger demographic will be financially affected when an individual who is a close family member is afflicted with an illness. Hence, there is an increasing importance for any healthcare system of the future to have its priorities set on equal and fair access regardless of social standing via a variety of funding mechanisms best suited to the context. Social, political and economic issues are bound to surface in the future if this is not achieved.

Balancing flexibility between cost and capability

As healthcare demands are expected to grow exponentially and potentially outpacing the supply-side to respond to the increasing and changing needs, there is a need to bring about a shift from the emphasis on physical infrastructure development which can be costly and most importantly require a substantially long time to build.

With rapid advances in medical knowledge comes greater specialisation of healthcare professionals. The emphasis then is to develop and institutionalise holistic training for more healthcare professionals, and leverage on technological platforms such as ready consumer infrastructure to innovate care delivery models. We are seeing increasing adoption of digital healthcare solutions such as tele-health and smart home monitoring systems, which are already popular in developed markets such as North America, and will begin to gain traction in Southeast Asia and Singapore.

The strategic intent is to ensure that healthcare capability is always current and ready to support the long-term investment in infrastructure development.

A shift towards wellness

The future appears to be one that is faced with rising treatment cost. As population gains affluence, lifestyles become more sedentary, consumption of high-calorie foods increases and birth rate falls, all of which contribute to an ageing population that is more predisposed to chronic diseases. What is new, however, is the alarming rate at which chronic diseases are increasing in Southeast Asia – diabetes and obesity cases in Southeast Asia quadrupled between 1970 and 2005, twice the rate of the United States in the same time period.

Another paradigm shift may be the need to approach the study and management of healthcare from the perspective of 'wellness' management. This may be yet another application of the principle of "Prevention is better than Cure". It is simply a question of not doing too little when things are easy to solve in the early stage before it becomes complicated and expensive when it becomes too late, leading to potential productivity lost due to poor health.

Wellness incentive programs in the form of gamification techniques can be deployed to encourage people to remain and stay healthy. Most importantly, it promotes the shift in mindset to take individual responsibility of our own physical and mental well-being. Collectively, we can contribute to a healthy society and healthcare ecosystem as a whole.

Flexing governmental muscle for healthcare

Governments will continue to play the de facto role in healthcare, propping up the pillars of national security (universal health), efficiency (cost leadership), affordability (accessibility) and assuming liability within the health system. Rather than taking a single role of a custodian or regulatory authority, it is envisioned that governments will play a more active role in regional collaboration (government-to-government relations) and become a mover of market collaborations (a catalyst for business-to-business partnerships).

For most markets, the public sector is the largest healthcare provider and payer with the majority of patients under its care, and is thus an influential stakeholder in the healthcare system.

Conclusion

Our Deloitte Future Healthcare 3.0+ model presents our vision of the healthcare ecosystem of the future. While ambitious, it is nevertheless within reach given the current momentum and trajectory of the driving forces and technological development. In response to the new healthcare future, the Deloitte Future Healthcare 3.0+ model proposes a balanced integration of the healthcare system with the following differentiators:

- With the patient-centred care model and consumer-patient archetype taking centre stage, there is a need for renewed business healthcare models to account for better individual engagement and to pay heed to the importance of influencers and social networks.
- Healthcare systems need to look beyond a purely 'local for local' setup to take into account the rapid lifestyle changes, globalisation trends, as well as the disruptions brought on by today's rapid technological innovations.
- A dynamic and integrated operating model and strategic collaborations are the way to solve future healthcare demand strains and runaway cost escalation.

From the outside, the healthcare system may appear chaotic. In reality, it is a complex, balanced system that is subject to constant fine-tuning. The supply-demand relationship is supported by multiple financing mechanisms, while the free market forces and influences are balanced by the custodial roles of governments and regulatory authorities. All these elements should work in harmony to ensure a safe and equitable system with good patient outcomes.

Our Deloitte Future Healthcare 3.0+ model presents our vision of the healthcare ecosystem of the future.

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