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LEADERSHIP SUMMIT 2015

Leadership & Innovation in Healthcare
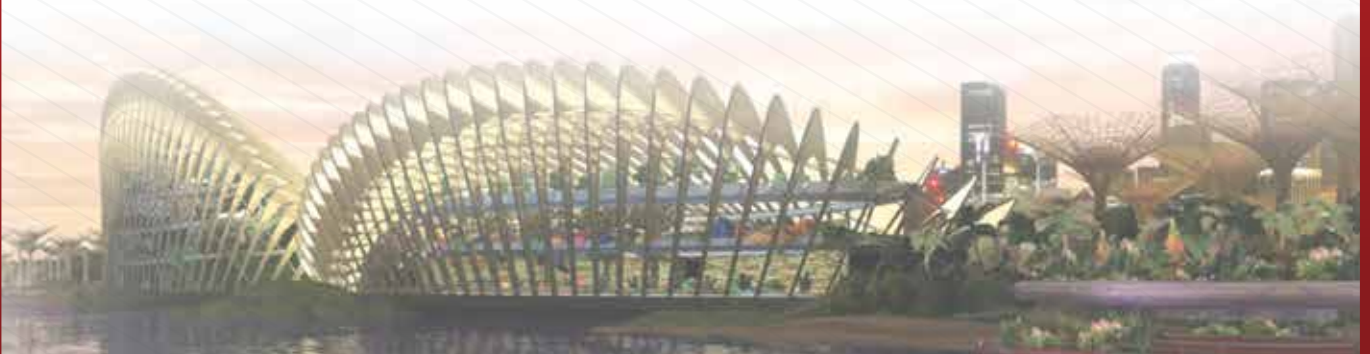
The Proceedings of the Fung
Healthcare Leadership Summit 2015

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FUNG HEALTHCARE LEADERSHIP SUMMIT 2015

Singapore, June 12, 2015

The Fung Healthcare Leadership Summit 2015 is sponsored by the Fung Foundation and organized by IDS Medical Systems Group (idsMED), both members of the Fung Group. The Fung Group is a Hong Kong-based multinational with business operations in Trading, Logistics, Distribution and Retailing in 40 economies. idsMED is the Healthcare arm of the Fung Group and a leading integrated medical solutions provider of equipment, supplies and services in Asia.

The Fung Healthcare Leadership Summit 2015 aims to bring together internationally recognized healthcare leaders and innovators in Healthcare practice, education and infrastructure from around the world to engage in a dialogue with leading practitioners, senior management of healthcare and educational institutions, government officials and business leaders from the Asia-Pacific Region.

New and significant demands are being made on the healthcare infrastructure of ASEAN countries, with the population almost doubling between 1990 and 2012. The adverse shift in demographics that governments everywhere are facing has created new sets of challenges and opportunities.

ASEAN governments are trying their utmost to keep pace with rising costs and the new demands of an increasingly affluent population expecting better, cheaper and more responsive healthcare. The theme of the Summit, "Leadership & Innovation in Healthcare" will see our eminent speakers address a myriad of issues, opportunities & challenges, and innovations & trends emerging in healthcare.

The one-day event will have speakers from across the world present the following:

- Opportunities & Challenges in Asian Healthcare
- Leadership in Healthcare
- Innovation in Healthcare

The Summit will commence with a keynote panel discussion on Asian Healthcare, followed by keynote addresses on Healthcare Leadership and Innovation. This will be followed by networking cocktails and an exhibition. The event will end with a gala celebratory dinner in the evening with a highlight keynote presentation on China.

The Fung Healthcare Leadership Summit is a great opportunity for leading healthcare practitioners, thought leaders and decision makers to deliberate, network and act on emerging issues and challenges of healthcare in Asian countries.

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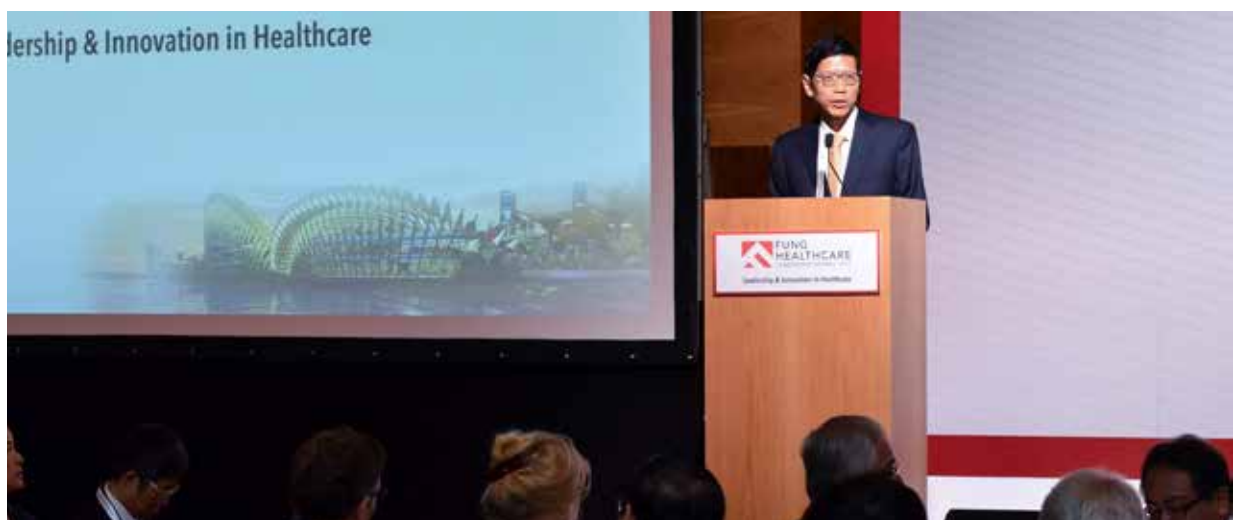
OPENING REMARKS

A Catalyst for Business Collaboration in Healthcare.

A SIGNIFICANT INITIATIVE TO PROMOTE HEALTHCARE EDUCATION ACROSS THE REGION.

Mr Ben Chang
Group Managing Director, IDS Medical Systems Group (idsMED), Hong Kong

Welcome
It is indeed an honour to organise the inaugural Fung Healthcare Leadership Summit 2015 in Singapore during this significant SG50 milestone year. Our goal is to take you somewhere where you have never been before and to discuss leadership and innovation in healthcare, and how we can re-imagine healthcare.

Healthcare Trends in Asia
Healthcare accounts for 10 percent of global GDP. The global demand for healthcare will increase from US$6 trillion today to more than US$12 trillion in 10 years' time. This is due to an incredible growth of household income of the middle class especially here in Asia. There is also a rapidly expanding population of senior citizens in Asia. These factors will drive the demand for healthcare, resulting in increasing costs.

The United States spends 17 percent of its GDP on healthcare, which amounts to $8,600 per capita. This is an astonishing amount, which may be unsustainable in the long term. On the other hand, Organisation for Economic Co-operation and Development (OECD) countries spend $3,000 per capita. The rest of the world is only spending $88 per capita on healthcare. That means that most people around the world are not getting enough healthcare. In fact, healthcare is the single biggest business opportunity of the world as more people demand for better healthcare.

Despite its incredible economic growth, China is spending under $30 per capita. The government of China aims to make healthcare available to the entire population in the next ten years. Healthcare spending will grow as much as eight times in the next ten years. However, China, India, ASEAN nations and other developing countries do not have enough money for healthcare. This means that leadership, innovation and technology must play key roles. In fact, companies in Asia are working very hard and differently to deliver healthcare at lower costs. There are opportunities whereby innovation that is developed in emerging markets can flow to places such as the United States to drive costs down.

Opportunities in Healthcare
We are seeing a tremendous convergence of the three greatest technologies for the next millennium, which are nanotechnology, biotechnology and advanced wireless technology. This convergence will bring together a more cost-effective healthcare. Besides technology and innovation, we might also review mundane concepts and proven management catalysts like supply chain management which can transform healthcare.

The Fung Group through IDS Medical Systems Groups (idsMED) entered the healthcare industry just three years ago. The objectives are primarily to apply practices of good distribution and supply chain management so as to drive down costs, and to enhance the effectiveness and efficiency of the healthcare supply chain. Today, our healthcare industry faces a number of challenges, not least being the inefficiencies in the medical device supply chain. Through our distribution network in the eight countries, idsMED can be the enabler for a more efficient and timely delivery of products and services.

Though this Summit, we aim to enhance leadership and innovation by providing a platform for the sharing and deliberation of key trends, opportunities and challenges in the healthcare industry.

Making Significant Contributions to the Development and Delivery of Effective Healthcare.

Dr. Victor Fung
Fung Group Chairman, Hong Kong

Distinguished guests, ladies and gentlemen,
Let me first wish you a warm welcome to this conference. I am absolutely delighted to be back in Singapore because of the 50th anniversary of the founding of this nation. It is truly a privilege to address this distinguished gathering. I see many eminent doctors in the audience and I'm afraid I'm only a doctor in business administration. But I am a passionate believer that well-run businesses can make a significant contribution to the development and delivery of effective healthcare. We do a lot of work in global supply chains and the application of some of the ideas and disciplines to the healthcare industry can make a distinctive contribution.

During this time of reflection in Singapore, I have been thinking about how important Singapore has been and continues to be, to the Hong-Kong based Fung Group. Singapore was our first foray into South East Asia. My father started coming here in the early years. In fact, Li & Fung opened an office here in 1973 and it has been over 40 years. Singapore has always been our regional headquarters in the ASEAN region and remains our largest hub outside of China. Singapore became even more important when we integrated our distribution services – the IDSMeds division joined the Fung family in the late 1990s.

Since my father William and I established an educational foundation nearly a decade ago to mark the Fung Group's 100th anniversary, we have developed a very close relationship with Singapore's universities. Every year, the Fung Scholars' Programme enables 400 undergraduates in 29 institutions in six countries to experience learning and networking outside their own culture. The National University of Singapore (NUS) and the Singapore Management University (SMU) are partners of the Fung Group in Singapore. Together, we are nurturing leaders for a globalised future. Now, the Victor William Fung Foundation is pleased to be deepening our ties with NUS by establishing a new medical fellowship - The Fung Clinical Fellowship.

The theme of this Summit – Innovation and Leadership in Healthcare - could not be more timely. The whole world is trying to find its footing as the economic power rebalances and shifts towards Asia. By 2030, Asia is said to account for more than 50 percent of global consumption. Before the financial crisis in 2008, the OECD countries accounted for over 80 percent of global consumption. Within a generation, the trend has shifted from less than 20 percent of global consumption for non-OECD countries to over 50 percent. This indicates that Asia is driving much of the increase in economic prosperity and consumption that the world expects to see in the coming decades.

ASEAN, with nearly 9 percent of the world's population, and an evolving regional economic community, will be a very key contributor. With the trend of rising affluence in Asia, there is an increasing demand for quality healthcare services in our region. The opportunities for the medical sector are huge. This future demand can only be met through leadership and innovation, matched by research and training. But the flip side of opportunity is challenge, and there will be plenty of those.

Top of my list is demographics. The population in our region as well as around the world is ageing. Never before has the world handled ageing of this scale, and at this speed. And Asia is at the frontier. Certainly, there are opportunities as there will be a huge demand for geographical medical and support services. But it will also put huge pressure on hospitals and clinics as we do not have enough care homes or community-based healthcare services for elderly people living alone.

How will we rise to these challenges? To what extent can digital technology and the Internet provide solutions? Our panel of distinguished speakers and panellists will be addressing some of these issues in the Summit.

Of more immediate concern is how we can control and eliminate infectious diseases in a world that is increasingly inter-connected. Who can forget how Singapore and Hong Kong suffered when SARS emerged in 2003? Now, we have MERS. With hundreds of millions of travellers flying around the world each year, we have reached a new risk threshold.

On the economic front, we have seen a widening gap between the haves and have-nots. This global phenomenon translates directly into having or not having ready and affordable access to healthcare. It will be wonderful to take advantage of the latest scientific breakthroughs and the benefits that they can offer.

But what will happen to the perpetually poor? Improvement in terms of access to clean water, proper nutrition and better hygiene cannot go far enough. We also need to take steps to improve the quality of health of all. Where will the financial and professional resources come from? How will we deliver modern healthcare inclusively and effectively, while always looking at managing the costs? Such questions are even more urgent when you consider the devastating impact of natural disasters on poorer countries. The most recent examples being the two earthquakes in Nepal. In that aspect, Asia is highly vulnerable. In the world that is increasingly prosperous, these issues will always constantly test our humanity. They do not grab headlines like the global financial crisis, but they are every bit as significant in determining the future. It is therefore essential for healthcare leaders and those who are providing healthcare services, to meet and exchange ideas in forums like this.

ASEAN is moving closer to the reality of a single market with free flow of labour, good and services and investments. At the same time, there is the deepening relationship between ASEAN and China. Against this backdrop and as part of the Fung Family's tribute to Singapore's fifty years of nation-building,

I am pleased to announce the establishment of the The Fung Clinical Fellowship at the NUS Yong Loo Lin School of Medicine. A permanent endowment of S$3 million will be established. The purpose of this programme is to support Singapore's efforts to address unmet clinical needs in the ASEAN countries by training local doctors and developing clinical skills. It is also to provide opportunities for NUS faculty members to work on diseases less commonly found in Singapore. Under the programme, expert faculty members from the NUS and National University Hospital (NUH) will visit and train doctors in other ASEAN countries and China. It will also allow doctors from ASEAN and China to be trained in NUS. Recipients will be called Fung Fellows, in line with our other programmes around the world.

Last but not least, we wish you a fruitful discussion at this event.

Opportunities and Challenges in Asian Healthcare.

DELIVERING EQUITABLE HEALTHCARE AT AN AFFORDABLE COST.

Prof. Dr. Ali Ghufron Mukti
Chairman, Health Financing Policy and Health Insurance Management, Indonesia
Prof. Gabriel Leung
Dean, Li Ka Shing University of Medicine, The University of Hong Kong, Hong Kong
Tan Sri Dato' Dr Abu Bakar Bin Suleiman
Chairman, IHH Healthcare Bhd, Malaysia
Prof. London Lucien Ooi
Chairman, Division of Surgery, Singapore General Hospital and Chairman, Surgery Academic Clinical Programme, SingHealth-Duke-NUS

MODERATOR
Prof. Datuk Dr. Jeyaindran Sinnadurai
Deputy Director General of Health (Medical), Ministry of Health, Malaysia

The panellists' discussion covered these areas:

- Delivering equitable healthcare at an affordable cost
- How economic development brings wealth and key health issues
- Universal burden of non-communicable diseases
- Need for better integration and coordination of services
- Healthcare reforms in Asia

Financing Healthcare Expenditure
Datuk Dr. Jeyaindran discussed the impact of healthcare expenditure on healthcare outcomes. The healthcare industry accounts for almost 11 percent of global GDP, which is more than double the 5 percent of GDP spent annually on defense. In Asia, there is great diversity and disparity in terms of access to healthcare, and the percentage of GDP that goes towards a nation's healthcare varies from 2.1 percent to 17.5 percent.

Does more money mean better outcomes? Analysis has shown a high but not perfect correlation between the expenditure and outcomes. The markers of health of a nation are the decrease in infant mortality and the increase in life expectancy. However, many developing countries are able to achieve impressive outcomes with comparatively low costs, as seen in some ASEAN nations.

There is a ceiling effect on healthcare expenditure and achievable outcomes. Based on the law of diminishing returns, relatively low-cost measures such as mass immunisation have produced significant outcomes against expensive care for those with multiple co-morbidities due to non-communicable diseases (NCDs).

Rising up to the NCD Challenge
Prof. Gabriel Leung raised the concerns about the rising costs of non-communicable diseases in the region. NCDs are the leading cause of death in Asia today and have become a socio-economic and development challenge of epidemic proportions. Commonly known as chronic diseases, NCDs refer to cardiovascular diseases like heart attacks, strokes, cancers, chronic respiratory diseases and diabetes. NCDs and environmental threats are largely avoidable if there is early detection and we manage these threats within our control. To combat the growing burden of NCDs, governments have to work together to raise awareness

and control the diseases. Asia needs to focus on universal health coverage and sustainable developments to progress towards equity in health.

Globally, the fight against NCDs is gaining momentum. Countries are uniting to generate greater awareness, management and control of the diseases. Steps are also being taken to persuade major global food chains to develop best practices to incorporate healthier usage of sugar and salt. In 2011, the World Health Organisation (WHO) developed a worldwide monitoring framework to enable the tracking of progress in preventing and controlling major NCDs. This monitoring framework will be integrated into a global action plan for the prevention and control of NCDs.

Healthcare Reforms in Indonesia
Prof. Ali Ghufron Mukti discussed the challenges of achieving universal healthcare in Indonesia. Indonesia has evolved from a country facing inadequate and unfair health financing to one that is able to regulate healthcare. Made up of over 17,000 islands, Indonesia is a huge country with a population of 250 million. The healthcare system is predominately managed by the government sector. There are 2,300 public and private hospitals with a doctor to population ratio of 1:250.

A decade ago, the country faced challenges of inadequate and unfair health financing mechanisms that resulted in high out-of-pocket payments, especially by the poor. There were also unaffordable pricing of medicines and health services and shortage of health personnel especially in remote areas. Both big cities and remote areas faced limited health infrastructures. The government recognised these problems and has since implemented several schemes, including the National Society Security System (SJSN) to raise service quality and improve access to healthcare.

Due to these healthcare reforms, the demand for healthcare facilities has been increasing. Over the last six months alone, 230 hospitals have been built, with a new hospital being built every two days. The number of health centres and primary care clinics has also increased. This has also led to opportunities in strengthening the health infrastructures such as healthcare technologies/tele-medicine, medicine and medical tourism, as well as in the areas of wellness, screening and prevention. Innovative healthcare technology and IT are used to solve challenges in achieving universal healthcare.

Enhancing Private Healthcare in Malaysia
Tan Sri Dato' Dr. Abu Bakar Bin Suleiman shared the opportunities and challenges of the private healthcare sector in Malaysia. The country's public sector hospitals are overburdened and crowded with lengthy waiting time and insufficient beds. The demand for private healthcare services is further driven by medical insurance provided by employers, giving rise to opportunities for wider coverage and better treatment benefits. While there is rising demand for services by the private healthcare sector, competition among private hospitals has also increased.

Malaysia's savvy consumers require greater transparency for information relating to the performance measurement of services. As a result, hospitals are pressurised to outdo each other with rankings in different areas such as better patient experience in form of shorter waiting time, improved communication and service cost. To meet market needs, hospitals are constantly seeking ways to provide better integration of services and quality care at affordable cost. Today, the healthcare industry remains fragmented with many standalone players. One opportunity for improvement is through consolidation. By way of mergers and acquisitions, players can take advantage of economies of scale to enhance productivity, procurement efficiencies as well as obtain better bargaining power for volume purchases of medical equipment and consumables.

With better living standards and healthcare services, Malaysians are living longer than before. By 2020, 9.9 percent of the population or 34 million people will be over 60 years of age. This rising number of senior citizens in Malaysia will create a whole new market for elderly healthcare and facilities. However, the aged care industry in Malaysia is only at its infant stage and there is great interest in the industry to meet rising demands. Recognising the need to develop quality elder care services and facilities for the future, the

Government of Malaysia has given priority for aged care under its Economic Transformation Programme and identified healthcare provision as one of the National Key Result Areas (NKEAS). There are several innovative healthcare entry point projects (EPPs) focusing on elder care, including the EPP 15 Mobile Healthcare Service Love on Wheels and EPP 17 Retirement Villages Eden-on-the-Park.

One of the most difficult challenges the country faces as it ages is how to develop quality health outcomes without paying top costs. Malaysia's current model of healthcare delivery results in escalating costs which are not sustainable and do not serve the patients well. The system is fragmented, transactional and lacks integration. The country needs to look into a transformative healthcare delivery model that can provide patients with high quality services cost-effectively.

Providing Universal Coverage for Rapidly Ageing Population

Prof. London Lucien Ooi highlighted Singapore's healthcare model and how it has evolved over the past 50 years. Singapore offers universal healthcare coverage to the citizens, with a financing system anchored on the twin philosophies of individual responsibility and affordable healthcare for all. There are multiple tiers of protection to ensure that no Singaporean is denied access to basic healthcare because of affordability issues. In terms of public funding, Singapore has the 3M model, namely Medisave, Medishield and Medifund. Through a mixed financing system, Singapore uses the market-based mechanism to promote competition and transparency and adopts technology to improve the delivery of healthcare services.

Although Singapore has secured good healthcare outcomes for its population, the country's population of 5.4 million is ageing rapidly. With changing demographics, the country is facing challenges that the healthcare industry has not dealt with before. In the next five years, one in five people in Singapore will be above 65 years old. The younger generation will have a heavier burden in taking care of the elderly population. In anticipation of the demand for medical capability, the country needs to ramp up the development of aged-care homes and increase facilities for healthcare overall. Singapore is already building at least four more hospitals for community care and acute care And these facilities will also have to take into account age-friendly concepts.

In tandem with the need for building more infrastructure, there is also a need to increase healthcare manpower. The NUS School of Medicine has plans to increase intake of medical students, and a third medical school, its, the Lee Kong Chian School of Medicine was established in 2013, jointly between Nanyang Technological University and Imperial College London to also address this need..

To improve chronic care, the Ministry of Health (MOH) has introduced the Community Health Assist Scheme (CHAS) to enable Singapore Citizens from lower and middle-income households to receive subsidies for medical and dental care at participating CHAS General Practitioners (GPs) and dental clinics near their homes. The Agency for Integrated Care (AIC) was also formed as an independent corporate entity under MOH Holdings (MOHH) in 2009 to look into the enhancement and integration of the Intermediate and Long-Term Care (ILTC) sector.

While there will be many health challenges relating to the ageing population in Singapore, the government as well as the private healthcare sector are taking steps to ensure that no Singaporean is denied access to basic healthcare because of affordability issues.

Beyond Training Competent Health Professionals.

Prof. Tan Chorh Chuan
President, National University of SingaporeDeputy Chairman, Agency for Science, Technology and Research, Singapore

Executive Summary

There have been a number of major historical shifts in healthcare education, and going forward, compelling drivers for its further transformation, with particular relevance to Asia. The key thrusts which could underpin such a transformation will create opportunities and challenges for educator-leaders to spearhead fundamental changes in healthcare education.

Three Generations of Healthcare Education

The evolution of health professional education can be broadly grouped into three generations of reform*. At the beginning of the last century, training was science-based and as this knowledge-based burgeoned, the curricula became packed with basic science with little clinical correlation.

In the 1960s, a problem-based learning method was introduced, involving the integration of basic and clinical sciences. Students may approach problems with little prior knowledge and in seeking the answer to a problem, they would have to identify what the most important issues were and how to come up with the solutions. This method is still relevant today but has its limitations. In the future, this form of education will be replaced by a system-based approach, where the focus will be on patients, competency-driven goals and inter-professional training.

Redesign Health Delivery for the Future

Our current health system serves us well but it is not structured for the rapidly changing health landscape or the most critical health challenges for the future such as global epidemics, ageing populations and the ever-rising demand for more healthcare professionals.

In Singapore, the number of residents who are aged 65 years and above was 350,000 in 2012 and is expected to grow to 1 million in 2030. This three-fold increase in the number of elderly, when coupled with the 4-fold greater rate of hospitalisation with elderly patients may mean that by 2030, we will have more than 12 times the impact elderly patients have on the hospitals today. This will place a very major strain on our healthcare systems if we continue maintain the current systems of health delivery for older patients.

We certainly have to continue optimising healthcare delivery for "today" by using current models with incremental improvements. This can be in the form of in-hospital innovation and making better provisions to look after patients at the most appropriate level, whether primary, step down or community care. It is also important to continually adjust and enhance healthcare financing to ensure universal coverage and incentives that drive appropriate healthcare choices.

In order to transform the healthcare system and to prepare for the future, we would need trans-disciplinary teams that will work well together, use technology and skills to provide and empower healthcare in various home settings (home-community-hospital) through re-designed clinical and public health approaches. Instead of training in professional silos, as is typical in many Schools at present, doctors, nurses and other health professionals should have substantial components of inter-disciplinary team training focused on patient-care in a range of settings outside of the acute hospital.

Pedagogical Innovations at the National University of Singapore (NUS)

The DUKE-NUS Graduate Medical School developed an innovative TeamLEAD approach to transform and improve medical education so as to prepare doctors for the future. The NUS Yong Loo Lin (YLL) School of Medicine pioneered problem-based learning in the 1990s. To ensure that the training of medical students is responsive and relevant to the changing healthcare landscape, the School has built on its problem-based and stimulation-based learning approaches to develop an outcome-based curriculum.

To produce well-rounded doctors, the School also requires its students to undertake professional activities to achieve specified Entrustable Professional Activities. These include the ability to discuss the pathophysiology of patient conditions; to manage a typical case and to know when to seek help or escalate appropriately; to do primary and secondary prevention; and to communicate to patients and their families about the conditions.

Nurturing Leadership through Inter-professional Education

Beyond academic achievements, the NUS Yong Loo Lin (YLL) School of Medicine also encourages its students to participate in experiential learning and to develop leadership through serving the community.

For example, the School's students launched its Neighbourhood Health Service as an initiative to care for underserved patients. This student-run home visit programme in Singapore reached out to 1,200 elderly residents in public rental flats for health screening.

The health benefits to the community were remarkable. After one year, the proportion of residents on treatment for hypertension increased from 63 percent to 93 percent, and blood pressure control improved from 42 percent to 79 percent. Students also reported gains in various learning domains such as leadership skills, communication skills, teamwork and the ability to identify social issues.

Through inter-professional education such as the Neighbourhood Health Service, the NUS YLL School aims to develop a "collaborative practice-ready" health workforce where students go through stimulation-based training and are embedded as part of the healthcare teams.

Conclusion

Nurturing leadership of health professionals is crucial for the transformation of our health system. There is a growing demand for leaders to initiate that change. In addition, we need to nurture health professionals adept at working in trans-disciplinary teams, who can become change agents in the healthcare sector. Our investment in healthcare education today will produce competent leaders of tomorrow who will continue to facilitate and drive transformative health systems.

Maintaining Clinical Investigation for a Healthcare System Striving for Excellence.

Prof. Marc Alan Pfeffer
Victor J. Dzau Professor of Medicine, Harvard Medical School, USA

Executive Summary

Clinical research, by its very nature of probing, examining and comparing, generates new information to better understand and improve public health. At its best, new discoveries are identified to lessen disease burden, improve quantity and quality of life of future patients. The implementation of these recommended changes however can be disruptive and costly for the healthcare system to adopt for its current patients. Conducting clinical investigation is also a resource-intensive endeavour with a revenue stream that is often independent from clinical care.

Clinical Trials

The amount of money that we spend on biomedical research is sky-rocketing. Research is disruptive on what we do today. We can practice medicine today and live in today. The other alternative is to continue research or today's medicine will be outdated. Indeed there are macro and micro forces in biomedical research and development, which will impact the interests of the government, the medical industry, the healthcare systems and hospitals.

Clinical trial is defined as a research study in which human subjects are prospectively assigned to interventions to evaluate the effects of those interventions on health-related biomedical factors. Clinical trials define the quantitative investment of the benefits and the risks involved. In order to make the distribution system more efficient, there are ongoing changes sufficient to change practices. This may be disruptive to the healthcare systems. Hence we need to generate more data and find ways to measure how strong is the data to ensure that healthcare systems run smoothly.

Handling Heart Attack

There is a whole new paradigm shift on how heart attack is being handled. In the midst of having a heart attack, the number of heart muscles can be changed. Heart attack is time dependant on how soon the artery can be operated. When one is suffering from a heart attack, it is the responsibility of patients to know the symptoms of heart attack and to head to the hospital immediately. Patients also need to know the route of the nearest hospital. Nowadays all hospitals are required to have a coronary care unit. A coronary care unit is a hospital ward specializing in the care of patients with heart attacks and various other cardiac conditions that require continuous monitoring and treatment. This involves using trained personnel, nurses, equipment and beds. This may be disruptive to the hospital as there may be a shortage of manpower resources and beds for other patients who may be in a more critical stage.

Research strives to improve conditions and issues in the environment. Medicine which was not available several years ago is now made possible through research, thereby offering the latest care and hope to patients. Research also gives a sense of professional satisfaction, attracting and retaining the most talented trainees who take pride in the work they perform.

How to Change the System

Heart failure is a common diagnosis and also the biggest burden for health care system. We can prevent heart failure by the lifestyle we lead. This is by taking responsibility of our heart condition, by exercising, taking our medicine and being aware of our cholesterol level.

It is difficult to educate people to take responsibility for their health. When patients have stroke, they rather see an occupational therapist than take medicine to prevent stroke.

Hospitals receive report cards on their performance and they are ranked. For those hospitals at the bottom of the list, they have to improve on their rankings. It is reported that patients at the higher-ranking hospitals perform better. Performance measures are part of the feedback in improving the healthcare system.

The biggest cost comes from people who need intensive care. There are measures to prevent them from reaching that stage.

Currently, there are about 3,000 heart transplants in the whole world. Previously for heart attacks, drug coated stents are implanted into the heart, hence allowing people to live longer.

Through research, there was the discovery of the HeartMate II, which is one of the most advanced devices to treat advanced heart failure. It is available today. The HeartMate II is a heart pump called an LVAD (Left Ventricular Assist Device). An LVAD is designed to help the left side of the heart pump the blood the body needs.

It does not replace the heart. This discovery has improved the survival rate from 25% to 68%. Patients with advanced heart failure have improved survival rates and quality of life when treated with implanted pulsatile-flow left ventricular assist devices as compared with other medical therapies.

Conclusion
Hospitals need to make a commitment to innovations. Through cardiovascular research, more people can live longer. Hospitals should focus on giving the best patient care, having the best trainees, and establishing innovative research. Change by definition is disruptive.

However let us approach the change process with the mindset that although change may be a costly practice for today's medicine, this is done so that tomorrow's medicine may be even better.

Promoting Healthier Lifestyle, Reconceptualising Health Policy.

Sir Malcolm Grant
Chairman, National Health Service (NHS) England

Executive Summary

The current models of healthcare in economically advanced societies are heading towards financial disaster as the cost impact of every growing demand for healthcare outstrips the growth in national GDP. With the inexorable rise of non-communicable diseases, there has been a corresponding increase in ho fyi spital attendances and admissions.

Whilst there is overwhelming evidence for shifting resources back from cure to prevention, the policy levers to promote healthier lifestyles are notoriously difficult to operate, particularly in liberal societies that impose tight limits to government interventions.

Classic Public Health Model: Lessons from the British Experience

Healthcare in England is provided by a service that, unusually, has a single payer and a single provider - the National Health Service (NHS). The majority of healthcare services including primary care, hospitals and long-term services in England are provided by NHS, and are free at the point of need to all permanent residents. Founded in 1948, NHS is the world's largest health service and the world's fourth-largest employer.

NHS adopts the classic public health model — one that protects its population against a wide list of externalities, including causes of infectious diseases, regular vaccination, environmental pollution controls, food quality regulation and improvement of the quality of public health. The NHS was founded at a time of great social insecurity following the Second World War, when many people had the fear of not being able to afford medical treatment for themselves and their families. NHS' universal healthcare commitment provides for all, irrespective of race, age, social status and health conditions.

The proportion of GDP that is invested in national healthcare systems varies significantly. According to the World Health Organization, healthcare expenditure accounted for 9.1 percent of total GDP in the UK (in 2013), of which 8 percent is wholly funded from tax. It is one of the more efficient systems in the world, with expenditure per head of population significantly below most of the rest of Western Europe and dramatically below the USA. Despite this, the NHS is facing acute cost pressures as demand rises at around 4.5 percent annually while GDP growth remains at around 2 percent, leading to crowding-out of investment in other public services, and the challenge is to provide improved healthcare quality outcomes without increasing costs.

There are many factors arising from the fact that people live longer and have more complex health issues that are contributing to the rise in healthcare costs. Adult smoking, alcoholism and obesity are behavioural components that add to the burden. There has also been a significant shift in the global incidence of diseases. According to the World Health Statistics (in 2014), 70 percent of lives lost due to premature death (in 22 countries, mainly African) is still caused by infectious diseases and related conditions. In more economically advanced societies infectious disease is no longer the major killer. The balance is continuing to shift across the world. Between 1995 and 2012, 56 million people were successfully treated for tuberculosis and 22 million lives were saved.

Social Burden of Obesity and Physical Inactivity

Today the challenge for us is the growing impact of non-communicable disease. Having the most effective healthcare system can still result in poor outcomes if there is no control over the rising incidence of diseases that are attributable to human behaviour. In the UK, obesity has become one of the top three social burdens generated by the people, causing extraordinary ill health among its population. The phenomenon of obesity causes an increase in the number of incidences of cardiovascular diseases, Type 2 diabetes and cancers. Studies have found that the average age at which people in the UK first become obese is decreasing. Of children entering school at age 5, 10 percent are now obese; by age 11 the proportion has

risen to 20 percent. Obese children have an 80 percent probability of becoming obese adults, carrying with them the increased risks of heart disease and type 2 diabetes. In England, more money and time are spent on bariatric surgery for the morbidly obese than on the prevention of obesity in the first place.

Physical inactivity is a major related factor in obesity. It is a major risk factor in a number of health problems including coronary heart disease, type 2 diabetes, breast cancer, colon cancer as well as impacting global life expectancy. As much as 9 percent, or more than 5.3 million of the 57 million deaths worldwide, can be attributed to physical inactivity. If inactivity decreases by 10 percent to 25 percent, more than 530,000 to 1.3 million deaths respectively can be averted every year. This is a challenge for the healthcare system and public health.

Health Situation in England

Smoking, obesity, and alcoholism are major challenges in the country. Obesity is one of the top three Non-communicable diseases are becoming more prevalent and are the leading cause of death in the UK. As many as 20 percent of adults smoke; 33 percent of adults drink too much alcohol; over 60 percent of men are overweight (25 percent of these are obese); and 57 percent of women are overweight (28 percent of these are obese). 70 percent of NHS' budget is now spent on long-term health conditions. People are living longer lives but are not necessarily healthier for longer. People's lives are conditioned by their environment, by poverty and by custom. For some, there is almost a cultural assumption of entitlement to smoke, drink and become obese, and look to the NHS for a care and repair service.

The consequences are grim. Since 1996, the number of people living with diabetes has more than doubled. It will exceed 4 million in England (out of a population of 56 million) in 10 years if no action is taken. This will result in complications such as blindness, stroke and heart attack. The cost of treating diabetes already accounts for 10 percent of the NHS budget and there are now some high-intensity interventions, including the trial of a new diabetes prevention programme targeted at 100,000 high-risk people.

These diseases can be detected earlier and better managed to prevent deterioration and hospitalisation. There is a need to review three elements of public healthcare policy, namely population health, per capita cost and experience of care.

Reconceptualisation of Health Policy – Towards New Models

In order to reconceptualise health policy, NHS England has developed its Five-Year Forward View. It sets out a vision of a better NHS, the steps to get there and the required actions. The forward view sets a clear direction for the NHS and aims to have radical reforms to healthcare and improvement of public health. Some of the actions require new partnerships with local communities, local authorities, employers and patients. NHS will also take a nationwide action to combat obesity, smoking, alcoholism and other major health risks. Patients will be helped to gain far more control of their own care, as new models of healthcare delivery would require enhancing personal responsibility and empowerment through knowledge.

NHS England is taking decisive steps to break down traditional barriers of how care is provided between family doctors and hospitals, between physical and mental health, between healthcare and social care. More care will be delivered locally, out of hospital, and new services will be organised to help people with multiple health conditions, instead of single diseases. New technologies such as low cost genome sequencing, real time -omics analysis & monitoring, machine learning, smartphones & mobile computing, real time measuring & monitoring and personal data clouds will also play a key part in future healthcare and prevention models.

Conclusion

England today primarily suffers from the burden of non-communicable diseases of the developed world – including diabetes, cancer and obesity. While people are living longer, they are not living healthier. It is therefore a challenge to improve healthcare quality outcomes while ensuring that costs do not increase. Through its Five Year Forward View, NHS has developed radical reforms to healthcare and the improvement of public health.

Six Emerging Technologies Changing Healthcare for the Better.

NEW THERAPIES WILL IMPROVE BOTH HEALTH AND HAPPINESS.

Dr. Mark Liponis
Corporate Medical Director, Canyon Ranch, Lenox, USA

Executive Summary
Medicine in the 21st century promises better quantity and quality of life for all. Presenting the latest data on health and happiness, we are able to identify and discuss six emerging technologies that will change health for the better during our lifetimes. These include energy medicine, smartphones, microsensors, 3D printing, nanotechnology and stem-cell therapies.

Life Expectancy
People who are health consciousness are at an all-time high. Motivated people will generally be interested in health and wellness as these represent the ability to achieve one's full potential. In terms of life expectancy by country, the US is not ranked in the top 30 countries for life expectancy. Singapore on the other hand is at the top of three countries with an average life expectancy of 84 years.

Happiness
The 10 elements of happiness are self-esteem, optimism, social engagement, personal control, work, personality, health, altruism, humour and purpose. When we look at happiness by country from the UN source, we observe that the US has risen from No. 30 to No. 17. On the other hand, Singapore has dropped from No. 3 to No. 30. Optimal health by country comprises of health and happiness for the population. Switzerland takes the lead, followed by Sweden and Iceland.

Doctors are making people live longer. It is seen that people are living longer in countries with many physicians. Trained physicians have a reasonable way to improve the longevity of the population. On the other hand, doctors are not making people happy.

Prevention Is Better than Cure
It is easier to have preventive measures than having to cure or manage a condition. Treatment that is rendered may be unnecessary or dangerous.

According to a 2013 Bloomberg review, about two thirds of the cardiac stents placed in the US may be unnecessary. In 2013, there are 773 deaths from installing the stents and 4135 injuries. In the US, people consider the healthcare system as the safety net to lead the lifestyle that they want.

Children are lining up for bariatric surgery. They do not want to learn how to eat healthily, nor do they want to exercise. Children are having surgery so that they can get rid of the extra fats. Unfortunately the fats come back in other areas.

In the near future, the issue is on how to improve the quality and quantity of health and happiness without spending more money on treatment.

Six New Technologies Changing Healthcare For The Better

1. Smartphones
   The future of medicine is in the smartphones. The phone becomes a personal health optimisation and notification engine. The individual can be informed whether they are doing the right thing, eating the right thing and behaving the right way. They can also be notified to do something different with their lifestyle.

These phones now can be powerful tools that can empower personal health. The smartphones are able to track their health and the quality of sleep they get per night.

By Wearing Fitbit's New Heart Rate monitoring trackers on the wrist, they can track their fitness. The automatic ingestion monitor is a food tracker for the diet. It resembles a wearable Bluetooth headset that wraps around the ear. The system is able to identify the food the person is eating and accurately estimate how much of it is consumed.

2. Microsensors

Mircosensors are devices that convert non-electrical physical or chemical quantity into electrical signals. Microsensors can produce low power and flexible sensors.

Google has unveiled a prototype of lens implanted in the eye to measure the glucose levels of diabetics. Wireless Eye Implant is able to continuously measure intraocular pressure. If a patient has cataract, this lens can test whether he is having glaucoma or has developed high pressure in the eye.

3. 3D Printing

3D printers are able to print a wide range of medical devices. 3D printing can enable customized knee replacement surgery. Based on MRI images, the digital image is then used to create customised cutting blocks for that patient's specific knee.

The patient can have specifically customised in terms of design and built for his specific knee. With 3D printing, one can also build the cast with ultrasound, which helps the bones to heal faster. The cost decreases tremendously with 3D printing.

4. Nanotechnology

Nanomedicine refers to highly specific medical intervention at the molecular level for curing disease or repairing damaged tissues. Researchers have developed synthetic platelet-like nanoparticles that can be injected near a wound to act like natural platelets in helping to treat it. Patients who are suffering from leukaemia, or having a bone marrow transplant, can consider using nanoparticles for their treatment instead of blood transfusion. Magnetically-directed nanoparticles could help heal broken bones. New cancer treatment kills the bad cells with nanoparticles and lasers. Hence cancer can be treated at lower costs.

5. Stem Cells

Stem cells are cells that have the ability to transform into many cell types. Bone marrow stem cells can be injected into the heart. This can transform, heal and repair dead muscle tissues of the heart. A combination of stem cell and 3D printing can print organs on demand. There is a potential to grow a new organ such as using stem cells to grow a new ear.

6. Use of Energy Medicine

There are different types of energy, which includes light, heat and sound. People who feel anxious or agitated will recover quickly when they listen to sounds of nature. Ultrasound with the use of the scalp can produce effects that can improve our cognition, enhance better memory and increase levels of productivity. This can help patients with Alzheimer's disease. Magnetic stimulation of the brain can improve conditions of depression.

Conclusion

We are healthier than ever. We are happy and we could be happier. We are getting more tools, for tracking and taking personal responsibility for our health. These therapies will improve health and happiness and enhance the quality and the quantity of lives.

Healthcare Delivery in Developing Economies.

RE-ENGINEERING THE FLOW TO MAKE A DIFFERENCE.

Prof. Hau Lee
Thoma Professor of Operations, Information and Technology, Graduate School of Business, Stanford University, USA

Executive Summary

It is a daunting task serving the healthcare needs of patients in extreme conditions like those in developing countries with poor infrastructure. Dramatically changing an inefficient supply chain using innovative approaches could give millions around the world access to safer and more affordable healthcare services. Riders for Health, a social enterprise company, shows how they were able to re-engineer the healthcare supply chain to make a difference.

Challenges in the Healthcare Supply Chain Management

Managing the supply chain in the healthcare industry is becoming increasingly complex. Firstly, it is not easy to obtain information as there is a lack of transparency and collaboration across organizations. Missing or misplaced inventory is not uncommon. Materials may perish or shrink over time and companies could face long lead time to replace key equipment or materials. From a financial perspective, inefficient pricing of product and services, coupled with misaligned incentives for resource acquisitions further add to the list of challenges faced. In developing countries, such challenges are even greater.

Studies from the World Bank have shown that it can take up to 39 signatures in countries such as Nigeria to complete a typical export transaction. In contrast, it only takes two signatures to do a similar transaction in an efficient country such as Singapore.

> *"What is needed are supply-chain managers without borders: people to sort goods, identify priorities, track deliveries and direct the traffic of a relief effort in full gear."*
> The Economist, January 5, 2005

Reengineering the Healthcare Supply Chain in Africa

Take the case of Africa, where infrastructure and logistics challenges are evident. 62 percent of the population of Africa live in rural areas where the best roads are little more than dirt tracks. Public transportation is infrequent and the delivery of healthcare on foot or by bicycle between sparse villages is an exhausting and ineffective task. Since there are no integrated roads, transportation nor logistics network, healthcare supply chains are plagued with high costs and inefficiencies. Additionally, healthcare providers face the big problem of "the last mile" to deliver medicine and healthcare to the bulk of the population.

The good news is that there are models to improve the healthcare supply chain to create greater values and efficiencies. Andrea Coleman and Barry Coleman co-founded Riders for Health, an international social enterprise that manages and maintains vehicles for health-focused partners in sub-Saharan Africa. Their expertise in transport management has successfully enabled the delivery of vital healthcare services to rural communities on a reliable and cost-effective basis.

How did they achieve this? Several distinct changes were implemented to create a dramatic impact on performance and bottom lines, including:

- Improved information flow and visibility:

  - Scientific inventory management to track assets, usage, mileage and utilization

  - Training and knowledge management for health workers on motorcycles

- Material flow:
  - Standardization of the motorcycle fleet
  - Preventive maintenance such as self-pre-ride checks and services
  - Setting up a hub and spoke logistics network with high availability of spare parts
- Financial flow:
  - Developing a fixed service cost per km model
  - Allowing the choice of ownership by Riders
  - Credit guarantee for asset acquisition with Nigerian Guaranty Trust Bank

By running a fleet of reliable motorcycles, Riders for Health ensured that the chain in healthcare delivery was never broken by vehicles breakdown, thereby increasing health worker productivity. It was also far cheaper to keep a vehicle running efficiently over time than to repair it when it breaks down completely.

Riders for Health was also able to replicate this success in other regions and the payoffs have been significant. In Zambia for instance, the health delivery system involved seeing patients from the hospitals to the urban health centres, rural health and rural health posts, which were all outreach sites. With the improved system provided by Riders for Health, more patients in Zambia were able to have access to services delivered by environmental health technologists including inspections (water, sanitation, food and premises), mosquito control, health education and immunizations.

A Stanford University study based on Riders for Health in Zambia (from October 2011 to February 2012) showed the following results when compared with earlier years:

- Average number of outreach visits per week per motorcycle increased from 0.1 to 0.92
- Average number of km travelled per trip per motorcycle increased from 0.9 to 6.1
- All the motorcycles were utilized
- Over 3,500 more cases of outreach interventions for one-time child measles immunization
- Over 3,000 more cases of outreach for campaigns for vitamin A supplements
- 200 more cases of growth monitoring of children per month
- Greater cost efficiencies (cost/km reduced by more than half with Riders)

Building a NewHealthcare Supply Chain for Liberia

Most recently, Riders for Health is now working to help rebuild Liberian's health system, using its knowledge of vehicle logistics and maintenance to reach rural communities with healthcare. During the Ebola outbreak, Riders for Health engaged the government of Sierra Leone and Liberia to provide reliable transport to refer suspected patients and reach rural communities for surveillance and education. Although Liberia is already declared Ebola-free by the World Health Organization, Riders for Health continues to build on this work, launching projects to establish a comprehensive and well-managed fleet of motorcycles, four-wheeled ambulances and trekking vehicles that can ensure that even the most rural of communities can be reached with essential healthcare.

Riders for Health has demonstrated that by improving the effectiveness of the supply chain, public health performance can also be improved, resulting in more patients receiving immunization and medical care.

Conclusion

Although we recognize that transforming supply chains in developing economies isn't easy, there are ample opportunities to improve the performance of health service delivery. By embracing innovation and smart ways to re-engineer (information, material and financial flows), we can provide greater efficiencies and value throughout the supply chain.

A Disruptive Solution to Healthcare.

SUSTAINING HEALTHCARE SYSTEM WITH AFFORDABLE TOOLS AND TECHNOLOGY.

Dr. Jason Hwang
Co-Founder and Chief Medical Officer, Icebreaker Health, USA

Executive Summary

Disruptive innovations have led to increasingly affordable and accessible products and services in many industries. This model can guide investments and innovations to reduce costs and improve the quality and accessibility of healthcare. Business model innovations can transform today's hospitals and physician practices.

Challenges in Rising Healthcare Costs

Healthcare costs have been escalating globally with the United States taking the lead and outspending other nations. Changing demographics and the increase in non-communicable diseases contribute to the costs of healthcare in many countries. The question that remains is how we can bring down healthcare costs and increase the value return of healthcare spending.

Centralisation followed by Decentralisation: A Look at the Computing Industry

In order to address the rising cost of healthcare, let us first look into the evolution of computing. The diagram below represents the history of computing, as laid out in a set of concentric circles, starting from the centre. In the early days, computing technology was centralised, costly and required an expert team of people to use them.
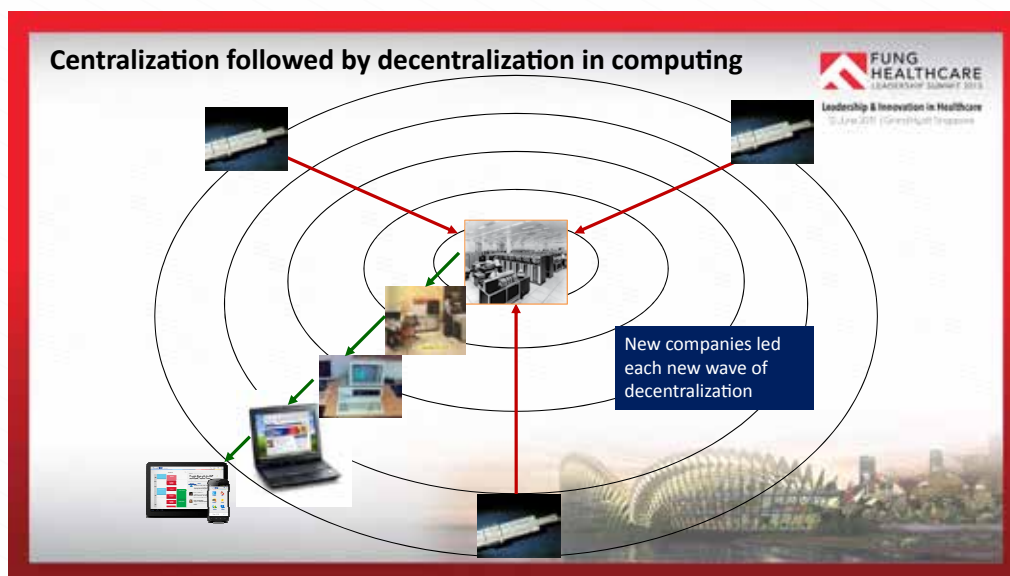
The mainframe, a complex and expensive machine that used to be available to only a few large corporations, lies in the centre of the circles. In order to solve problems, people had to take their problems to be analysed by the mainframe. It was precisely this inconvenience and the associated high cost that drove several waves of decentralisation.

The first wave of decentralisation came in the form of the mini-computer (second ring). It was simpler to operate, smaller and cheaper than the giant mainframes of that time, making it more accessible to more companies. Subsequently, people wanted to use the computer at home. This then led to the creation of the personal computer (PC), creating the next wave of decentralisation (third ring). The first PCs performed simple tasks like spread sheet, word processing and gaming. The need for work mobility further led to the creation of laptop

computers (fourth ring), setting another wave of decentralisation. Finally came the computing portable devices (fifth ring), which we all carry along with us now.

These waves of decentralisation happen over and over again, using a process known as disruptive innovation. Each wave of decentralisation was led by a new group of companies that had different innovations. Products created through disruptive innovation were initially not as good as the original product, but they appealed to a new circle of customers that were cost driven. These new products then started to gain their foothold in the marketplace and eventually stole customers away from the original products. This disruption in business models has been the dominant historical mechanism for making things more affordable and accessible, and for generating economic growth.

Decentralisation in Healthcare

In the healthcare industry, the decentralisation that follows centralisation is only at the infant stage. Like the mainframe computers, hospitals are expensive centres to maintain, and they require many skilled individuals to operate well. Expecting such general hospitals to become cheap by cutting reimbursements and payments can only be a pipe dream, just like having mainframe computers to become cheap so that we can have them in our homes.

The good news is that with disruptive technologies, it is now possible to shift the venue of patient care from hospitals to the patient's home. As this shift happens, more capabilities will be transferred to nurses, technicians and eventually to the patients themselves. These disruptive changes will empower people with fewer skills to do more things for themselves. That is how we can make healthcare more affordable and accessible to more people, even those who are unable to receive medical care today due to their geographically remote location or financial status.

Democratization of Healthcare

With self-directed care, we can rely on ourselves to manage our own healthcare with tools such as mobile and home diagnostics, remote monitoring and wearables.

Ultimately, it is not the technology but the business model that determines success or failure. Companies need to avoid what is known as the 'Business Model Malpractice' – a situation whereby one is plugging new technologies into old business models. This will only cause health costs to rise rather than fall. To succeed, companies have to consider profitability, reputation, historical notations, cultural resistance and external normalities such as regulations and payment policies.

To begin, companies need to find tools and technology that are affordable for patients who can take care of themselves and sustain the healthcare system. Then they need to look for early adopters of these new products and services and encourage them to become loyal users over time. This will lead to a new ecosystem of disruptive business models ranging from mobile care services, wireless healthcare devices, worksite clinics to retail clinics.

Conclusion

Embracing disruptive innovation is the answer to driving healthcare costs down. Along with new technologies, companies need to adopt new business models that can eventually create a sustainable and new ecosystem that makes healthcare more affordable for more people.

China – The Next Era of Growth.

ONE BELT, ONE ROAD INITIATIVE OF CHINA

Dr. Victor Fung
Fung Group Chairman, Hong Kong Executive Summary

One Belt, One Road Initiative

China has had various initiatives in the last three years. In 2013, President Xi Jinping was in Moscow when he announced the railroad link between Chongqing, the western province of China and Moscow. However, this was inefficient as passengers had to change trains along the way. In March this year, President Xi Jinping announced the "One Belt, One Road" (OBOR) concept, also known as the Two Silk Roads. He called for the revival of the ancient Silk Road by establishing a new Silk Road Economic Belt.

The Silk Road Economic Belt, known also as the One Belt, originated from the traditional Silk Road, which is the route from China to Central Asia, to Turkey, Russia, the Baltic countries, and then to Venice. One Road, called the "21st Century Maritime Silk Route Economic Belt", is a complementary initiative aimed at investing and fostering collaboration in Southeast Asia, Oceania, and North Africa. The road will originate from the eastern coast of China, down to Hong Kong, Singapore, Southeast Asia, the Malacca Straits, India, the eastern parts of Africa, up to the Middle East, and then to Turkey.

The traditional Silk Road, also known as the Northern Silk Road, and the Maritime Silk Road, also known as the Southern Silk Road, together form the One Belt, One Road initiative. This is a significant concept being developed. Based on the Fung in-house research, this initiative encompasses 60 countries involving 4.6 billion people. These people produce 37 percent of global GDP and a third of global consumption.

Before the financial crisis, 83 percent of global consumption was in the OECD countries, namely, Europe, North America and Japan. The remaining 17 percent of the global consumption belong to the rest of the world. By 2030, over half of this consumption will go to the non-OECD countries. In one generation, there will be a major shift of consumption out of the OECD countries. The emergence of a new global class of 3.5 billion people in the developing countries will drive the shift in consumption. More than half of this consumption comes from people living in the Southern and Northern Silk Road countries.

The Silk Road Economic Belt is the place where the growth markets of the future will be. The Northern Silk Road consists primarily of a quarter of the global population. It is rich in natural resources and raw materials. The Northern Silk Road will bring a flow of commodities and resources into China. The Southern Silk Road is a linkage to the future markets and is an outbound zone for Chinese exports. This is the strategic significance of the two Silk Roads.

All the consumption and global markets have been concentrated in the US, Europe and Japan. The world has been focusing on the production in the developing countries located in the East and export to the West. Hence, the supply chain is to buy in the East and sell in the West. While the structure of the new supply chain is not quite fixed, there will be more activities in the countries in the Silk Roads with the One Belt, One Road concept. Just like a giant shopping centre, with China and Europe being the two anchor tenants, everybody will benefit. Hong Kong and Singapore can act as gateways to one part of the region, while Turkey acts as a gateway to the other part.

Asian Infrastructure Investment Bank

With the two Silk Roads forming a huge region, infrastructure is needed to build railroads, bridges and ports. The Asian Infrastructure Investment bank (AIIB) was therefore established. As of April 15, 2015, almost all Asian countries and most major countries outside Asia have joined the AIIB.

The purpose of the multilateral development bank is to provide financial support to infrastructure projects in the Asian region. AIIB will kick-start the building of infrastructure on the Silk Roads. The bank is regarded by some as a rival of the IMF, the World Bank and the Asian Development Bank (ADB) which will have to change to accommodate the realities of market and global consumption. AIIB will build the hard infrastructure. The soft infrastructure, which is made up of the flow of people, education, exchange, research and healthcare, will provide the linkage to form the economic zone where people cooperate and work together.

This will definitely be the Chinese government's policy and focus for the next decade. It will be looking at new markets and changes in the world. There will also be opportunities for countries to think about a new global order with a new multilateral system that is fit for today's world.
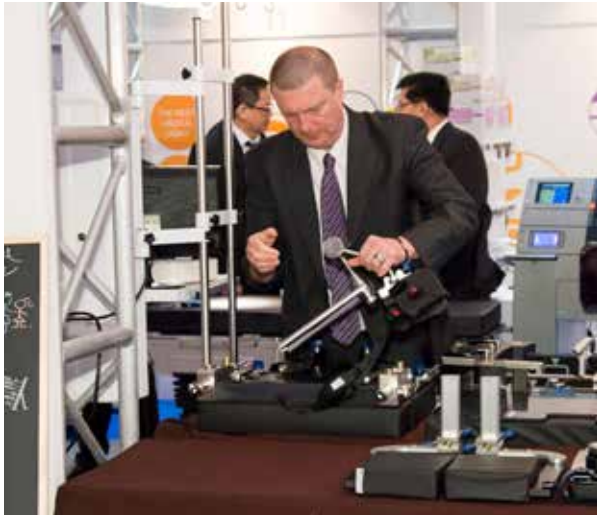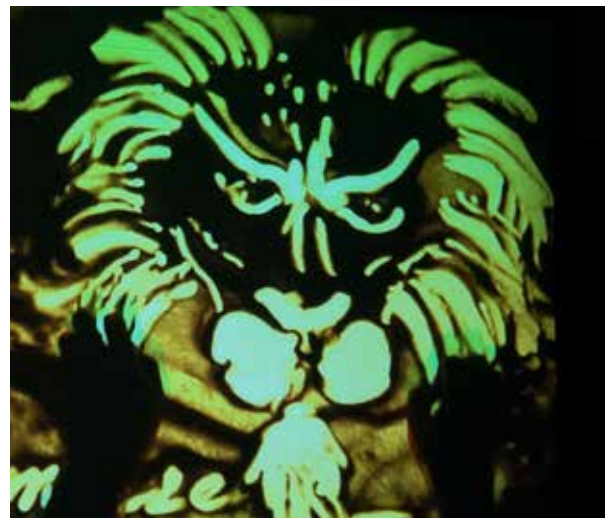
Thailand

Victor and William Fung Foundation was set up in 2006 to commemorate the Centenary of the Fung Group (formerly known as the Li & Fung Group). The Foundation is supported by Dr. Victor Fung, Group Chairman and Dr. William Fung, Group Deputy Chairman of the Fung Group with their personal funds to promote (i) leadership development principally through sponsoring programs in partnership with universities, and (ii) thought leadership principally through think tanks and educational institutions.

Fung Scholars Program

The Fung Scholars Program nurtures future world leaders through supporting university students to experience different cultures early in their careers. The recipients of the scholarships are chosen on the basis of their academic excellence and leadership potential.

As of March 2015, the Fung Scholars Program established in 29 universities worldwide with more than 3,700 Fung Scholars and Fung Fellows.

To maintain the network of Fung Scholars and Fung Fellows, the Foundation organizes an annual Leadership Conference as well as other activities.

Leadership Conference

Fung Scholars Leadership Conference 2014, in Hong Kong

Fung Scholars participated in community services activities

(Left) Tree Planting in Hong Kong   (Right) Fung Scholars Blood Donation Day in Hong Kong

Partnering Universities

The Fung Foundation partners with various universities around the world including Harvard University, Massachusetts Institute of Technology (MIT) and Princeton University from the US; Singapore Management University and National University of Singapore from Singapore; Oxford University and University of the Arts London from the UK; The University of Hong Kong, The Hong Kong University of Science and Technology and The Chinese University of Hong Kong; as well as Nanjing University, Peking University and Tsinghua University in China.

Other Funded Projects

Fung Global Institute

As an independent think-tank, this evolving learning institute generates and disseminates new thinking from Asian perspectives on issues that transform the global economy.

The Service Leadership Initiative

Cooperating with the Hong Kong Institute of Service Leadership and Management and eight tertiary institutions in Hong Kong, it promotes a new model of service leadership and learning in the post-industrial age, with the objective of preparing undergraduates to be more effective leaders in their career and community life.

The Hong Kong Polytechnic University – Peking University "The Li & Fung China Social Policy Research Fund"

The Fund supports the Joint PolyU-PekingU Social Work Research and Development Centre with an aim to provide better coordination for joint search endeavours, develop better linkages with stakeholders and government ministries.

The Center for Corporate Governance in Tsinghua University in China

The Center's mission is to promote high-quality research, education and training on corporate governance issues in China.

MIT/China Management Education Project in the U.S.

The Project supports faculty staff from Tsinghua University in Beijing, Fudan University in Shanghai & Lingnan (University) College and Sun Yat-sen University in Guangzhou to participate in study sessions at Massachusetts Institute of Technology (MIT), and for MIT Faculty members to participate in educational activities at the three institutions in China.

Fung (1906) Foundation

Fung (1906) Foundation was established in commemoration of the centenary of the Fung Group in 2006. The Foundation is supported by Dr. Victor Fung, Group Chairman and Dr. William Fung, Group Deputy Chairman of the Fung Group with their personal funds to support colleagues within the Fung Group around the world to engage in and contribute to their communities. The focus of the Foundation is on disaster relief, community-building programmes, entrepreneurship development and environmental initiatives, initiated by our people.

We believe that our communities and our people grow, develop and transform through community

engagement activities. Community engagement is a key part of the Foundation's strategy and integral to building sustainable communities that will thrive for generations to come. We provide resources and support for volunteering, share our knowledge and skills and raise funds to support important initiatives and campaigns.

We work closely with community partners worldwide around a strategic focus for impact. Key global partners include Business for Social Responsibility (BSR), Captivating International, CARE International, Habitat for Humanity, Red Cross/Red Crescent, Room to Read and World Wide Fund for Nature (WWF). We also work with a large variety of partners in each of our local communities.

Investing in the Potential of People

We believe that giving people the opportunity to learn and grow can help transform lives and contribute to the well-being of our communities. Throughout our global network, we partner with local organizations to support children, youth and adults who may be disadvantaged or disenfranchised to access education, learn new skills, and grow personally and professionally through mentoring and life-skills coaching. Through generous donations, we provide sponsorships for children and youth to access education and funding to build schools in remote areas.

Helping Communities in Need

The communities around the world where we live, work and do business are as unique geographically as are their specific needs. To make a meaningful difference in these communities, we seek to raise awareness of social and environmental needs and maximize the impact by encouraging our people for action. It is done through both global campaigns supporting universal issues and locally-organized activities that target specific needs. We engage in a number of local activities that are specific to social needs, from taking care of the elderly and children to providing medical and food supplies, computers, clothing and other items to meet basic needs and enhance livelihoods.

ABOUT IDS MEDICAL SYSTEMS

IDS Medical Systems Group (idsMED) is a member of the Fung Group – a Hong Kong-based multinational group of companies whose core businesses are trading, logistics, distribution and retailing. The Group employs over 40,000 people across 40 economies worldwide, with total annual revenue of over US$24 billion in 2014.

The Group was created through the privatization of the Medical Distribution business of Li & Fung Limited in July 201. IdsMED is one of the largest integrated solutions providers of medical equipment, supplies and services in Asia. It has an extensive distribution network covering various healthcare institutions including government and private hospitals, day surgery centres, specialist and primary care clinics, laboratories and nursing homes. In line with its expansion program in the region, idsMED now successfully operates in 8 countries: Singapore, Malaysia, Indonesia, Hong Kong, Philippines, Thailand, Taiwan and Vietnam.

Inauguration and Launch of idsMED Group

idsMED has emerged as a leading Asian brand in medical distribution with a new scalable and sustainable business model built on People & Technology and strong regional business partnerships.

The origin of idsMED dates back to the 1950's when the business was first established in Singapore. After a series of acquisitions through the 80's and 90's, the business was consolidated under Inchcape Marketing Services. In 1999, Inchcape was acquired by the Fung Group and became Hong Kong public-listed IDS Group in 2004. IDS was later merged with Li & Fung Limited in 2010.
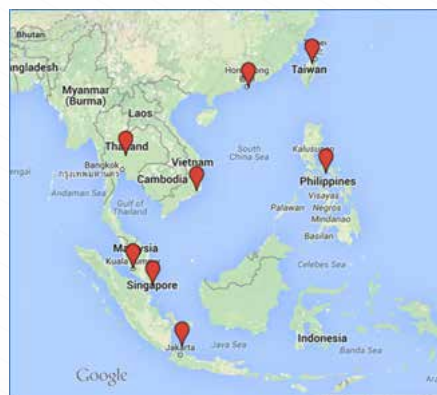
idsMED Regional Presence

idsMED represents world-leading medical brands, providing one-stop solution covering marketing, sales, biomedical engineering services and clinical support. Leveraging on its single, regional IT platform, idsMED also offers effective inventory management and logistics services. We provide a comprehensive and one-stop solution to its customers with a focus on a number of key specialties including Critical Care, Infection Control, Surgical Workplace, Diagnostic Imaging, Hospital Beds & Furniture, Cardiovascular, OBGY & Perinatal and Biomedical Engineering.

Meeting at the Healthcare Education Centre, Indonesia

With a strong focus on Healthcare learning & education, we have also developed a Healthcare Education Centre in many of our countries. Of particular note is the Healthcare Education Centre in Indonesia which supports continued education in healthcare. Our team consists of clinically trained personnel who work closely with Associations on the workshops facilitating training at our Education Centre.

The idsMED Healthcare Forum is a one day education event involving leading medical professionals and practitioners across the ASEAN region for sharing and exchanging knowledge and experience. This event allows encourages interactions among participants and provides a forum for the interchange of ideas. The idsMED Healthcare Forum has been held annually in Singapore, Indonesia and Malaysia and we will continue to roll this out to our newer countries.

idsMED Healthcare Forum 2014, Malaysia

This year, for the first time, the idMED Healthcare Forum was held on a regional basis in Singapore on the 13 June 2015.

FUNG FOUNDATION

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