



COUNCIL on  
**BUSINESS & SOCIETY**  
A GLOBAL ALLIANCE OF SCHOOLS OF MANAGEMENT

# Health and Healthcare

at the Crossroads of Business and Society

## Executive Summary

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## Contents

Welcome Address.....	2
Keynote Address: Business and Society .....	2
Featured Speech: Changes in global healthcare environments and Chugai's strategy.....	3
Results of Council on Business & Society International Student Survey .....	4
UNIT 1 "Healthy Employees, Healthy Corporations" .....	6
Plenary Address: Business and society at the crossroads – why is corporate health management so important?.....	7
Plenary Panel: Healthy Employees, Healthy Corporations.....	9
Parallel Session 1.1: Employee Health as a Strategic Imperative.....	11
Parallel Session 1.2: Implementing a Strategy for Health.....	13
Parallel Session 1.3: Psycho-Social Risks in the Work Place: Does Management Care? .....	16
UNIT 2 "Technology and Management Innovations in Healthcare" .....	20
Plenary Address: Technology and Management Innovations in Healthcare .	21
Plenary Panel: Technology and Management Innovations in Healthcare .....	23
Parallel Session 2.1: Innovative Technology Applications in Healthcare .....	25
Parallel Session 2.2: Business Model Innovations in Healthcare .....	27
Parallel Session 2.3: Management Innovations in Healthcare.....	29
UNIT 3 "Challenges in Managing Healthcare: Who Pays for Healthcare and How Is It Supplied?" .....	35
Plenary Address: Can health become an even bigger part of the economy without undermining fiscal sustainability? .....	35
Plenary Panel: Challenges in Managing Healthcare: Who Pays for Healthcare and How Is It Supplied? .....	36
Parallel Session 3.1: The Stakeholder's Roles: All Power to the Patients? .....	39
Parallel Session 3.2: Productivity and Cost: What Do we Pay for and Invest in? .....	40
Parallel Session 3.3: What Is a Better Healthcare System Like?.....	43
Closing Address: At the forefront of hyper-aging societies.....	48

## Welcome Address

Speaker: **Dean Hirokazu Kono**, Keio Business School

Focusing exclusively on financial results and performance can lead to important issues related to society such as sustainability, energy, governance, or healthcare being overlooked. The Council on Business & Society was established through the effort of six schools in 2011, in the belief that it is the responsibility of the leading business schools in the world to consider these issues alongside business issues. In 2012 the first forum addressed the theme of Governance and Leadership. This second forum addresses the theme of Health and Healthcare at the Crossroads of Business and Society.

This forum will differ from other academic conferences by emphasizing dialogue and collaboration between academics, business people, and the public sector, to find common approaches to come up with solutions. In addition, this forum unites the world's regions, allowing for consideration of diverse points of view. By joining together and examining our respective viewpoints, we can present a global voice with respect to these issues.

## Keynote Address: Business and Society

Speaker: **Mr. Takeshi Erikawa**, Former Vice-Minister, Japanese Ministry of Health, Labor and Welfare

Businesses interact with society through their core business as well as through non-core philanthropic activities. In Japan, many industry executives believe that businesses should contribute through the core business. The Japanese traditional ways of thinking about profit are, for example, “three-way (seller, buyer, society) satisfaction (in Japanese, *Sanpo-yoshi*),” “sincerity and consideration (in Japanese, *Chujo*),” and that profits follow righteousness. The results of this way of thinking are that CEO compensation is significantly lower than in the U.S., that service is a free gift to customers, and that wisdom is a treasure for all, which delayed the development of the patent system in Japan.

The major challenges facing Japan include a declining and aging population, shaking off deflation and creating steady economic growth, securing employment for the young, and ensuring sustainability of the social security system and healthy national finances. Companies can contribute to tackling these challenges by raising performance, contributing through taxes, providing permanent employment for young workers, developing them as globally adept human resources and improving labor practices to allow for childrearing, and for medical companies by developing new drugs for prevention and treatment of disease. Japan aims to tackle the challenges through the Abenomics policies, growth strategy and creation of an environment that stimulates innovation for the realization of regenerative medicine and drug development.

### **Featured Speech: Changes in global healthcare environments and Chugai's strategy**

Speaker: **Mr. Osamu Nagayama**, Chairman & CEO, Chugai Pharmaceutical Co., Ltd.

- **Achieving universal healthcare coverage and addressing unmet medical needs are among the key issues facing the world in the first half of this century**

In 2050, the world population will reach 9 billion people, of which around 22% will be over 60 years old. The pharmaceutical industry has been donating drugs to address problems of access to medicines in Africa and regions of Asia, but this does not create a long-term solution. The industry must consider how to change or improve the situation by achieving universal healthcare coverage, with greater capacity building and technology transfer. If universal coverage is achieved, a huge market will be created. The creation of a universal health system in Japan with premiums according to level of income achieved a useful distribution of wealth. Success in achieving universal coverage will be positive for both society and business. Even more pressing is the creation of drugs to treat as yet untreated tropical diseases. This will soon become the overriding issue for the

industry. Meanwhile, the industry faces many challenges, including increasing research and development costs, declining success rates for new drugs, and changing disease structures. Current estimates are that US\$2.2 billion is spent to develop a successful product, factoring in the costs of failures, and required annual research expenditure levels are expected to rise. This will require creative approaches that are not yet fully understood.

- **Effectiveness of medicines will increase through stratification of patients by biomarkers**

The new challenge is personalized healthcare to move from a situation in which around 60% of drugs are wasted due to not being effective for the patient, to stratifying patients by biomarkers so that the patient's responsiveness to a drug can be identified in advance, improving the compliance rate. Products and services must be developed with a focus on higher value, through biological and molecular targeting drugs.

### **Results of Council on Business & Society International Student Survey**

Speakers: **Ms. Hiroe Sakai**, Keio Business School  
**Ms. Alexis Kheir**, Tuck School of Business

A survey of graduate students of the six institutions in the Council on Business & Society was conducted to discover their views on health and healthcare. The survey was developed by the Council's academic committee and a group of university directors, and reviewed by experts in survey design.

- Asked about the value of the health care system in their country compared with others, only 13% of students overall said their systems were pulling ahead, while 41% think they are falling behind.
- Regarding the responsibility to improve the value of their health care systems, all regions put the government highest, with North Americans, Western Europeans, and Africans choosing the private sector second, Asians putting academic institutions second, and Central and South Americans putting individual consumers second.

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- Of 10 health-related issues, reducing healthcare costs was viewed as the most important overall. Regional responses differed on other important issues.
  - 84% of the students overall felt that it was either essential or very important that employers be concerned about their employees' health, and 71% felt that it was either essential or very important for employers to provide incentives and disincentives for their employees to adopt health behaviors.
  - Electronic medical records were seen as the number 1 area in which the private sector could improve the value of the healthcare systems of their country.



**UNIT 1 “Healthy  
Employees, Healthy  
Corporations”**

## UNIT 1 “Healthy Employees, Healthy Corporations”

Employer engagement in employee health is an important issue, not just from the cost and regulatory perspective but from a strategic perspective. Unit 1, “Healthy Employees, Healthy Corporations”, highlighted the major influence of the acceleration of Internet technology and personal interaction on the health conditions of employees, but since this phenomenon cannot be escaped, better coordination between technology acceleration, a fast-paced economy and individual health. Companies have a heavy burden of responsibility to find the right balance between economic results and healthy employees.

### Plenary Address: Business and society at the crossroads – why is corporate health management so important?

Speaker: **Mr. Axel Baur**, Senior Partner, McKinsey and Company  
Tokyo Office

#### Overview

Societal trends are creating new and increased health risks in the work environment. Employers that proactively use corporate health management to address potential issues can create significant competitive advantage.

#### Key Takeaways

- **The need for health management programs in organizations arises from changes in our working life and society**

5 megatrends are affecting the health of the working population

- Demographic change in the industrialized world, with increased life expectancy increases and falling birth rates lead to longer working life
- Industry shift from manufacturing to services and knowledge work, meaning people sit all day, and knowledge work requires strong personal commitment

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- Digitalization of work shifting activities online and creating an always-on mentality, doesn't allow for rest and leads to new forms of illnesses
  - Globalization leads to increasing competition among talent, increasing peer pressure to outperform
  - Sustainability and corporate social responsibility are required by society, forcing companies to engage in health management initiatives
- **Healthcare costs are increasing faster than other cost factors with presenteeism being the biggest cost driver**
    - Compound annual growth rates (CAGR) of German employer healthcare costs were 4% between 2005 and 2010, while during the same period the CAGR of wages and GDP were only 1%.
    - The top 3 diseases cause annual presenteeism costs of roughly US\$8.4 billion for the German car manufacturing industry.
  - **Companies can achieve high ROI through appropriate measures**

The primary reasons for offering health and wellness programs are to improve the health of employees and reduce absenteeism, and to reduce healthcare costs. Investments in health and vitality of employees are mostly long-term-oriented. A meta-analysis of 22 studies on health plan cost savings and 22 studies that examine sick leave absenteeism savings found significant ROI for both medical cost savings and absenteeism reduction.

Research suggests that behavior changes can drive down disease costs, but behavioral changes require consideration of many factors including incentives, education, awareness raising and promotion.

- **There is no one-size-fits-all solution, companies need to find the right setting that fits their business model and culture**

Disease patterns vary by industry and employment category, and the choice of measures taken must be industry-driven.

- **Employees acknowledge if their employer cares for their well-being**

In recent years, employee wellness programs have become the new standard at the best companies, with a majority now offering health initiatives, compared to almost none as little as five years ago.

Employees feel that health and wellness programs positively impact the culture at work. They are also linked to keeping morale up and people on track during seismic change like downsizing, offshoring, downturns in economy, and business slowdowns.

### **Plenary Panel: Healthy Employees, Healthy Corporations**

Moderators: **G rard de Pouvourville**, ESSEC Business School

**Professor Robert Hansen**, Tuck School of Business, Dartmouth College

Panelists: **Mr. Axel Baur**, Senior Partner, McKinsey and Company Tokyo Office

**Dr. Alberto Jose Ogata**, President, Brazilian Quality of Life Association

**Professor Elizabeth Teisberg**, Geisel School of Medicine, Dartmouth College

### **Overview**

Approaching health as an integral part of corporate policy and instrumental in building the best possible team will generate positive outcomes for all stakeholders.

### **Context**

The participants discussed the issues surrounding health in the workplace in different regions of the world to find common aspects that companies can use to improve the overall health of the business.

### **Key Takeaways**

- **The corporate interest in employee health is not altruistic**

The rising incidence and severity of chronic disease makes this a critical issue for employers worldwide. In addition to people coming to work sick, they come to work worried about loved ones, so the health



of employees' families is also important. Sickness, absenteeism and presenteeism result in hefty costs for the enterprise.

- **Attracting and retaining the best talent requires building an employer brand**

Innovative support programs can build staff loyalty, and raise overall productivity. Internal communications can be effective in changing awareness and behavior, and therefore part of employers' communications budgets should be spent on specific health matters such as obesity and smoking. Communicating to families can be a very powerful force to bring about changes in behavior within the household.

- **Focus on outcomes for money spent, rather than just reducing costs**

Leadership is needed to focus on what outcomes are obtained for money spent on healthcare in terms of productivity at work, rather than simply focusing reducing healthcare expenditure.

- **Need to change the services that are available to be more effective**

If services don't work, they are too expensive at any cost. If good choices do not exist, if services are not available, good choices simply cannot be made. Employers cannot wait for the government or health service providers to solve the problem. Employers need to catalyze the changes that they want to occur.

- **The impact of presenteeism is very difficult to assess**

Most companies do not measure presenteeism well. The estimates on costs of presenteeism in the US range from 2x to 15x the cost of healthcare. There are actuarial projections of the costs associated with health risks faced by employees, so employers can look at reducing the health risks that employees face to bring down costs. The expected payback horizon is five years, but many employers find that positive ROI for direct costs comes a lot sooner than expected, usually in around 16 months, and indirect cost benefits come as a bonus.

- **The focus for those with chronic diseases should be on moving toward health rather than simply managing the progression of disease**

In the spectrum of healthcare, there is a relatively empty space in early stage disease and secondary prevention - helping those diagnosed with chronic diseases to return to health rather than managing the resulting disease.

- **The WHO Healthy Workplace Framework and Model is applicable to all countries and cultures**

The WHO Healthy Workplace Framework and Model defines the five keys of a good program as leadership, worker participation, comprehensive program based on evidence, sustainability, and ethics. Using this model it is possible to create a program tailored for each region, but using the same logical model - otherwise it is difficult to implement a worldwide program in a global organization.

### **Parallel Session 1.1: Employee Health as a Strategic Imperative**

Moderator: **Professor Robert Hansen**, Tuck School of Business, Dartmouth College

Speakers: **Mr. Geoff McDonald**, Global Vice President Human Resource for Talent, Marketing, Communications, Sustainability & Water, Unilever Corporation

**Professor Elizabeth Teisberg**, Geisel School of Medicine, Dartmouth College

#### **Overview**

Focusing on employee health holistically as a preventive measure to avoid illness and fostering an environment where health issues can be discussed can result in much improved healthcare value and overall positive ROI, as well as a more resilient workforce.

#### **Context**

Participants discussed the necessity for organizations to take a strategic approach to improving employee health in view of long-term stability and benefits.

## Key Takeaways

- **To protect their corporate brand, companies must ensure the wellbeing of their employees**

We live in a world where people now have the power thanks to social media. That means that people really matter, and you ignore them at your peril. Any company with a purpose needs to focus on the wellbeing of their employees.

- **Companies must consider how to build resourcefulness and resilience in their staff**

The concept of resourcefulness, what can be done upstream to stop people getting sick in the first place, through rest, being able to switch off, and examining how teams are working together, is important to tackle stress and other illnesses. One of the largest sources of stress is lack of feedback from line managers.

Employers should provide opportunities to learn about mindfulness, meditation, yoga, the importance of recovery during the course of a day, and the importance of recovery during a holiday. In many cases the support materials have been in place, but have not been used due to fear of talking about mental health.

- **The choice is not between either spending more or reducing care – it is vital to focus on value**

Healthcare benefits in the US are ineffective, with low return on investment. Health results do not reflect spending, but the problem is the focus on spending, rather than outcomes. People want health, not treatment. People with a chronic condition miss almost twice as much work as those without a chronic condition. More effective prevention and secondary prevention are required. Health care services need to be structured around customers, with more logical organization of acute care to reduce the time needed to consult different practitioners. Consideration needs to be given to what generates value in healthcare.

Employers can catalyze dramatic and ongoing improvement in healthcare to make it more efficient and effective. Both chronic

diseases and good health are contagious – they are socially shared issues, so promoting healthy lifestyles at work is vital, but the issues vary between enterprises. Poor health employees incur health costs in addition to other knock-on costs to the enterprise. It is important to work with insurers or government to establish and share outcome measures by condition.

- **Efforts must be made to break the stigma associated with mental health in the corporate world**

In 2012, 92 billion euros was lost in the European economy due to absenteeism linked to depression and anxiety. Unilever has therefore created a framework to build leadership and management capability and understanding of the importance of a healthy mind. In addition to running campaigns such as bringing in role models to talk about the illness, senior leaders must be brave enough to talk about their own experience of depression, anxiety or other mental illness. Talking about the issue when it occurs and afterwards is seen as a sign of strength and courage.

The causes of mental illness are complex, and cannot always be attributed to issues in the workplace. Being anxious, stressed or depressed is not a sign of failure. One in four people will experience an issue at one point in their life. An atmosphere must be created where people feel comfortable talking about mental health issues in the workplace.

### **Parallel Session 1.2: Implementing a Strategy for Health**

Moderator: **Professor Jonathan Skinner**, Dartmouth College

Speakers: **Dr. Hideyuki Ban**, Hitachi Corporation

**Ms. Betsabeh Madani**, Cerner Corporation

**Professor Scott Wallace**, Geisel School of Medicine,  
Dartmouth College

## Overview

To improve the health of employees, employers worldwide can implement strategies by taking an active role in creating health benefits, designing a work environment, and influencing the delivery of care. By considering the leading trends in each of these areas, the consequences of employers' actions on the health of employees, and the implications for success, a strategic approach to employee health can be produced.

## Context

The participants discussed examples of strategies for good health within corporations that can create value for both the employer and employees.

## Key Takeaways

- **The goal should be better health**

“By keeping the health of its employees, a good health strategy is imperative to keep a company on the leading edge of productivity.”

– Prof. Scott Wallace

It is important to align strategic healthcare plans around the goal of better health as opposed to trying to measure or validate the return on investment. Living healthy is less expensive than living in poor health. By focusing on the health impact of programs instead of the financial gains within your organization, you will generally be headed in the right direction.

- **Convenience and reach are important considerations**

It is also important to make health initiatives convenient and easy to reach. Health covers your entire life and in order to maintain a healthy lifestyle over the course of your life, it has fit into your other activities without requiring a significant change in behavior. When stressful situations are encountered, maintaining significant changes that are out of character can be challenging.

- **Time is valuable**

Time is a phenomenally good incentive. Participation rates in health programs can increase dramatically when activities or programs can be done on the clock and the saving of time can be far more valuable than money.

- **Easy to use systems can increase productivity**

An easy to use system or interface can help facilitate transitions in lifestyle changes, enable employers to work more efficiently, and help employees maintain long-term health results.

- **Understand the health needs of employees**

An organization has to understand the unmet health needs of its own employees. What is causing your employees to be unhealthy? After identifying obstacles of employee health, creating a portfolio of initiatives to address a whole range of needs as opposed to having a single program that may only work for a small subset of employees can greatly impact the health of employees.

- **A good health culture starts from the top**

Lifestyles are communicable and successful strategies have committed and visible leaders. Changing the culture of health within an organization by starting with its leaders can be a simple change that can greatly influence other employees.

- **Fun matters**

Having a reward system or friendly competitions for being active and living healthy can motivate employees and encourage a positive lifestyle.

- **Health plans implemented by corporations can have significant impacts**

Hitachi's Central Research Laboratory set up a weight-loss program utilizing an Internet-based support system to help both medical staff and participants record and find the relationship between weight and behavior. Over 1,200 employees participated, with positive results including a 30% reduction in annual medical fees.

Cerner implements a strategic approach to population health management and out of over 14,500 employees, 88% participate in their Health program. Reevaluations of the healthcare program have resulted in premium increases of only 1.6% over the past five years, compared to the national average of premium increases between 7-10% in the US, and the company's total out-of-pocket spending per member per month on its employee's health for the past five years has also gone down by 13% with over 100,000 visits to on-site or affiliated clinics. As a result, US\$10 million in productivity costs have been saved.

### **Parallel Session 1.3: Psycho-Social Risks in the Work Place: Does Management Care?**

Moderator: **Professor Gérard de Pouvourville**, ESSEC Business School

Speakers: **Professor Annick Ancelin-Bourguignon**, ESSEC Business School

**Professor Naotaka Watanabe**, Keio Business School

**Professor Adrian Zicari**, ESSEC Business School

#### **Overview**

Psycho-social risks (PSR) cover a wide array of health issues related to the working environment, encompassing both psychological and physiological problems. Because they have received attention primarily from sociologists and psychologists, they may have been either underestimated or ignored by management. The importance of such health issues and their impact on the productivity of employees is clear, so organizations and managers must find a way to alleviate these issues. However, this is easier said than done, as there is also the risk of modern trends in management systems and performance assessment to actually exacerbate PSR. As such, rather than adopting short-term, "Band-Aid" solutions to these issues, it may be necessary to reassess the overall management approach.

## Context

The participants discussed the growing problem of PSR in workplaces, identifying the various contributing factors, and positing potential ways to address the issue.

## Key Takeaways

- **PSR and work-related stress are a major health and safety challenge in developed countries**

Estimates for the economic impact of PSR vary by country but are considered very high. In 2002 the cost of stress at work and related mental health problems was already on average 3-4% of gross national product in the EU, amounting to 265 billion euro annually. A 2007 estimate suggested that the cost of stress in the US was up to \$200-300 billion annually. Furthermore, in 2007, in the EU-27, 27% of workers were exposed to factors that could adversely affect their mental well-being. In addition, studies suggest that more than 50% of all lost working days are related to work-related stress.

- **There is a lack of consensus on how PSR are defined and perceived.**

Broadly speaking, PSR are defined as any ill-being or suffering at work. These are most commonly psychological, but can also be physiological. There are three common views on PSR. Firstly, there is the psychological view, which suggests that people suffering at work are fragile and require more support. However, this view is not supported by empirical evidence. Secondly, there is the industrial view, which considers PSR to be like any other industrial risk and should therefore be treated as such. Thirdly the psycho-sociological view suggests that there is a weakening of communities at work, and advocates reconciling performance and well-being. However, none of these views address the organizational context and the influence of management systems.

- **The role of management systems in the development of PSR is generally overlooked.**

Management systems are very active contributors to the growth of PSR. Performance management systems (PMS) in particular, such as management control systems, individual appraisal, or performance-based compensation, can aggravate PSR. Specifically, the use of PMS can lead to the intensification of work in the form of greater work constraints; workers are pushed to pursue even greater excellence; more performance measures can result in conflict between representations and values, and thus a loss of meaning for work; benchmarking, rankings and performance-based compensation foster competition between employees and can lead to feelings of insecurity; and finally, PMS are more likely to foster the occurrence of contradictory injunctions, in that workplaces are a vital space and a source of subsistence, social interaction, and self-esteem, etc., while individualized evaluation and compensation systems make the threat of punishment more salient. The argument can therefore be made that the influence of management should therefore be reduced.

On the other hand, while PMS and other forms of management control are undoubtedly a source of job-related stress, there are two dimensions to stress. The first is the pressure dimension, which can have a positive effect on performance, and the second is the threat dimension, which adversely affects performance. The two dimensions do not necessarily share a close correlation to one another. A preliminary study by ESSEC suggests that standard tightness, in the form of limited resources, increases both dimensions of stress, the interactive use of PMS by top management decreases both dimensions of stress, while performance-based compensation increases the pressure dimension of stress but not the threat dimension. The same study also hypothesizes that increasing the comprehensiveness of performance measurement increases the pressure dimension but decreases the threat dimension. However there is currently insufficient evidence to support this assertion. Nevertheless, the study suggests that there are some desirable features to management controls.

- **A mentoring program could be an effective means of addressing PSR.**

At the individual, workplace, and organization levels, the introduction of a mentoring program can be an effective tool for primary prevention of PSR. In other words, it can counteract harmful circumstances before they have a chance to produce problems. A mentoring program is characterized by an artificial environment that facilitates a developmental relationship between the mentor and mentee, “layman” and voluntary support, and a relationship that is also supervised and monitored by administrators or coordinators. Furthermore, there is no specific technique in mentoring. The relationship itself is the most important part. A pilot study on mentoring by Dr. Watanabe found that there was a positive correlation between how much mentee experience an employee had received in the past and their present job satisfaction. The same study found a negative correlation between past mentee experience and present strain.

- **PSR are not the result of “good” or “bad” people. They are a consequence of systems.**

In other words, changing the managers makes no difference if the management systems stay the same. Moreover, modern management systems can be highly impersonal and it may be beneficial to reemphasize human relationships and restore a sense of community at work. Furthermore, it is important to foster a climate of trust that makes it possible to raise concerns or issues of stress more naturally.



## **UNIT 2 “Technology and Management Innovations in Healthcare”**

## UNIT 2 “Technology and Management Innovations in Healthcare”

Emerging technologies are transforming both management and healthcare. Unit 2 addressed the theme of “Technology and Management Innovation in Healthcare”. The main findings were that while there is still plenty of room for technological innovation, rather than focusing on new technology the focus should be on patients’ needs or values.

### Plenary Address: Technology and Management Innovations in Healthcare

Speaker: **Mr. Martin Burger**, Senior Industry Advisor Healthcare, SAP APJ

#### Overview

Technology, if harnessed effectively, can provide rapid on-the-spot assistance and insights, and improve personalized healthcare.

#### Key Takeaways

- **Recent developments in technology should be leveraged to improve outcomes and patient satisfaction**

In healthcare, SAP’s guiding principle is “using technology to cost effectively deliver better outcomes and the best patient experience”, and this raises questions of how to best leverage mobile devices, big data, and other recent developments, to have an impact on individual treatment and involve patients in the treatment process. Helping patients to remain healthy and avoid visits to doctors or hospitals through health monitoring, alerts, and advice, is also an area of focus.

SAP Japan has worked together with Keio Business School on a design-thinking workshop to focus on patient empathy in addressing patient issues, bringing information on what people associate with a positive lifestyle together in a prototype of a life advisor app.

- **Timely access to useable analytical information for doctors can contribute to personalized treatment**

Doctors are working under a lot of stress, and need the right information at the right time to allow them to spend more time with patients.

There is a major trend toward the use of in-memory technology instead of traditional databases, which vastly improves the speed of data access, opening up new possibilities in the area of predictive analytics. This technology contributed to the Human Genome Project to quickly understand the information stored in the DNA and contributed to medical treatment.

The SAP-developed HANA healthcare platform uses in-memory technology to enable personalized medicine by combining clinical data in real-time with genomics data, proteomics data, and personal lifestyle data such as fitness trackers and pedometers. Seoul National University Hospital used the system to reduce use of antibiotics from 5.8% to 1.2%, while use of 3rd-line antibiotics could be reduced to zero.

- **Analytics can provide management insight into performance against hospital objectives in real-time, enabling effective leadership**

For hospitals a platform that enables efficient operations is essential. Management of staff skills and availability to ensure that skills are available where needed while at the same time minimizing overstaffing in any particular area is crucial for the effective management of hospitals and efficient use of tight hospital budgets.

## Plenary Panel: Technology and Management Innovations in Healthcare

- Moderators: **Professor Ana Malik**, FGV-EAESP  
**Professor Yunjie Xu**, School of Management, Fudan University
- Panelists: **Mr. Martin Burger**, Senior Industry Advisor Healthcare, SAP APJ  
**Ms. Betsabeh Madani**, Cerner Corporation  
**Professor Martin Pohl**, University of Tsukuba  
**Professor Scott Wallace**, Geisel School of Medicine, Dartmouth College  
**Dr. Jianwei Xuan**, Senior Director, Emerging Markets Business Units, Pfizer Corporation

### Overview

While many challenges remain in the application of new technology and management innovations to the healthcare sector, key factors for success include a focus on end users, outcomes, and awareness raising.

### Context

The participants discussed the challenges in applying technological and business model innovations to the healthcare sector, and how these innovations will impact the quality and cost of healthcare.

### Key Takeaways

- **The best applications of technology focus on the users rather than the technology**  
Successful innovation requires a focus on the value of innovation, rather than the novelty of innovation. Value orientation requires an understanding of key stakeholders. In the healthcare environment, this requires tracking of full cycle of patient outcomes. From a clinical efficacy perspective, the data required includes overall survival, QOL, and progression-free survival. It is important to note that patients value QOL more than progression-free survival.
- **Informatics is now entering a new phase of maturity**  
Two important trends are seen in the application of technology in healthcare: using technology to advance strategy, and using



technology to improve measurement of outcomes. While there has been effective tracking of inputs in patient interactions, such as medications administered, there has been little measurement or tracking of patient outcomes of healthcare experiences.

- **Fragmentation among existing systems is a major challenge to be overcome**

Hospitals, physicians, and occupational services all currently have their own systems, with none of them connected. How to integrate these systems to create value for the patients remains a major challenge. One approach is to use incentive models to bring the different players together. For instance, Germany introduced a model driven by health insurance players that encourages GPs and hospitals to work together.

- **Greater efforts are required to get physicians using available technology**

Healthcare is behind many other industries in the level of automation and there is segregation between those that are relatively advanced and those that are far behind. However, in order to adopt new technologies, physicians need to know what technology is available. One request that came out of the earthquake disaster was that the physicians requested the government to install an information system to allow access to hospital information in the wider region. In order to reduce the investment in training required, technology must be designed for non-technical users.

- **Many challenges remain to be addressed in the field of personalized medicine**

While personalized medicine can potentially bring great benefits in terms of more effective and targeted treatment, there remain challenges to be overcome to enable its widespread adoption, including commercial viability, the point at which it becomes inefficient to test for low-yield pathologies, and the large amount of tissue required for separate pathology testing for each medicine. There are studies underway on using predictive models for likelihood

of having gene mutation in order to test high probability patients and thereby increase the yield.

### **Parallel Session 2.1: Innovative Technology Applications in Healthcare**

Moderator: **Professor Yunjie Xu**, School of Management, Fudan University

Speakers: **Professor Yingyao Chen**, School of Public Health, Fudan University

**Professor Martin Pohl**, University of Tsukuba

**Professor Scott Wallace**, Geisel School of Medicine, Dartmouth College

#### **Overview**

Information systems are moving toward comprehensive tools for improving health outcomes for unique patient groups. Even though initial efforts to introduce outcome measures will be imperfect, they must be introduced and used in order to achieve improvements.

#### **Context**

Participants discussed how technology can transform the way healthcare is delivered, and challenges facing the industry.

#### **Key Takeaways**

- **Focus on what a better future should look like**

When considering technology it is important to understand what the technology is trying to achieve, and to identify the characteristics of technology that enable reaching the desired endpoint. Systems are progressing from augmented accounting systems, and data control systems, toward workflow support systems, and they need to move toward a comprehensive tool for improving health outcomes for unique groups of patients that exist. The organization of health facilities also needs to consider patients use of the facilities.

- **Every decision is a tradeoff, and should be made consciously**  
Even a facility that claims to make no tradeoffs, and serves everyone in every possible area, will not be able to do that as well as if they were focused on one particular group of people and their specific needs.
- **Assistive limb technology can be used to support rehabilitation activities**  
Tsukuba University is developing Robot Suit HAL (Hybrid Assistive Limb), which uses nerve signals sent from the brain to move in unison with the wearer's movements. This is expected to be applied in rehabilitation support and physical training support, among other uses. Cyberdyne-Studio has been launched as an innovative health shop offering training in the use of HAL to the public in a shopping mall setting, to make it more accessible and to allow a visit to be combined with shopping and other everyday activities.
- **Diabetes and the effects of diabetes are a growing health challenge for China**  
China has a relatively high disease burden. Diabetes is a growing challenge for China, and a lot of innovation is required in this area. People with diabetes require at least two to three times the health-care resources compared to people who do not have diabetes. The initial focus of innovation will be on safety and clinical efficacy, but later once widespread the focus will shift to access and cost-effectiveness.
- **It is imperative to take steps toward implementing outcome measures, even if it is not initially perfect**  
Initial efforts to introduce outcome measures will be imperfect, but will be improved through use. Lots of reasons can be found to dislike a certain system, but a focus on how to improve them creates much more creative solutions. Clinicians must be given some benefit or incentive in return for using a system, such as being able to do final reviews from home to improve their flexibility.

## Parallel Session 2.2: Business Model Innovations in Healthcare

Moderator: **Mr. Hiroto Furuhashi**, Associate Principal, McKinsey and Company, Tokyo Office

Speakers: **Mr. Hiroto Furuhashi**, Associate Principal, McKinsey and Company, Tokyo Office

**Professor Jonathan Skinner**, Dartmouth College

**Professor Elizabeth Teisberg**, Geisel School of Medicine, Dartmouth College

### Overview

The healthcare industry is engaging in significant business model innovation. Value-based competition, increased consolidation, and changes to methods of paying for healthcare are just some of the current changes taking place.

### Context

The participants examined digital innovations in marketing, accountable care organizations (ACOs) in the US, and other business model innovations in healthcare.

### Key Takeaways

- **Using technology as a means for innovation can have significant impacts**

Technology adoption – in data, analytics, devices, and channels – is shaping opportunities to go digital. There are major opportunities in digital customer engagement and advanced analytics to increase financial impact and customer relevance. Currently there are four big digital opportunities seen in the pharmaceutical industry, including competition on big data for advances in analytics, utilizing omni-channel for efficient engagement of physicians and patients, driving access in digital medicine, and implementing tech enabled services. There have already been advancements in developing multichannel commercial models using digital, as well as improving commercial models with advanced analytics and data, and when successfully implemented can result in up to a 30% decrease in spending and a 15% increase in sales targets.

- **An ACO can be a useful business model for shared savings between the government and healthcare groups**

An ACO is a group of doctors, hospitals, and other healthcare providers who come together voluntarily to give coordinated high quality care to patients. This is different from a health maintenance organization as the emphasis is on the providers – doctors, nurses, and hospitals – coming together rather than being employed by a large company. It still applies fee-for-service billing, but Medicare will pay an additional amount if the ACO brings costs down and keeps quality levels up, allowing both parties to benefit from the “shared savings.” Successful sites expanded the roles of non-physician providers such as nurses or physical therapists, integrated care management into clinical practice, completely redesigned the primary care practices making sure people didn't wind up in the emergency room, and improved information technology. The unsuccessful sites signed up for the program but did not implement any changes to reform.

- **The goal of healthcare is better health**

What if healthcare solutions were actually designed from the patient perspective? We need to think about value, the success for the health outcome of the patient for the money spent; not ignoring costs, but focusing on the outcomes. Most healthcare is designed to be customizable for every patient, but we don't take advantage of the expertise that could be developed for segments of similar patients. While every patient is unique, most medical issues are not unique. Individualization is also easier if you are working with an expert team involved in similar cases as they can customize treatments for you. On the other hand, if they treat a wider array of things, they may not recognize the individualization that you need relative to the standard protocols.

- **Keys to accelerating dramatic improvements in the value of healthcare**

- Define services from the patients' perspective. Define how value is created for patients.
- Organizing care delivery around solutions, also from the patients' perspective. What does the patients' journey need to be to succeed and improve their health?
- Create interdisciplinary/multidisciplinary teams to deliver these solutions because it normally requires expertise from more than one aspect.
- Measuring results for the purpose of accelerating the teams' learning. A lot of discussion around measuring results is around pay for performance or creating incentives, but measuring results in order for a team to learn when it's doing well, how it is doing well, and what drives improvements will accelerate improvements further.
- You can then align financial success with medical success if you have these pieces.

### **Parallel Session 2.3: Management Innovations in Healthcare**

Moderator: **Professor Ana Malik**, FGV – EAESP

Speakers: **Dr. Suleika Bort**, University of Mannheim Business School

**Professor Michael Woywode**, University of Mannheim Business School

**Dr. Jianwei Xuan**, Senior Director, Emerging Markets Business Units, Pfizer Corporation

#### **Overview**

In recent years biotechnology has grown as a field, bringing with it new technology, knowhow, and skills. A number of countries have attempted to develop national biotechnology industries to ensure that such efforts are successful; collaboration and interlinking between the various actors in the industry are of great importance, both in terms of knowledge-sharing and in terms of financing research. International cooperation is also essential. At the same time, the pharmaceutical industry has also undergone major changes. In particular, there has been

a trend towards more stringent assessment of healthcare technologies, cost-efficient research, a greater need for real world value evidence, and better customer and patient focus.

## **Context**

Participants discussed the development of the biotechnology field and factors for fostering a successful national biotechnology industry. Participants also examined changes in the healthcare field and the corresponding developments in the pharmaceutical industry.

## **Key Takeaways**

- **Biotechnology is a diverse field involving complex technology, knowhow, and skills.**

As defined by the OECD, biotechnology is “the application of science and technology to living organisms, as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services.” The main industry players are research institutions, small biotechnology companies, large pharmaceutical companies, and venture capital. Interlinkage between the various actors is essential for the industry to function properly. The biotechnology industry is characterized by an emphasis on research and development, high capital intensity, long product development cycles, and high levels of technological and market risk. In light of this, there is a high failure rate, and a strong need to develop, maintain, and manage inter-firm collaboration and strategic alliances.

- **The development of a country’s biotechnology industry is characterized by its history, national institutional context, and institutionalized patterns of firm behavior.**

The historical context can be summed up as the types of research institutes and policies that have historically existed in a certain country. Specifically, these pertain to the level of linkage with foreign research institutions and the commercial orientation of domestic institutions, as well as funding for basic research, and the direction of scientific education. The national institutional context consists of labor mobility, venture capital market, the government role in technology diffusion,



and technological accumulation in related sectors in a particular country's industry. Institutionalized patterns of firm behavior pertains to the level with which firms collaborate with research institutions and other firms, as well as the degree of foreign technology utilization. Overall these factors determine the stock of knowledge in research institutions and in the industry. In addition they influence the extent to which knowledge flows between institutions and industry, as well as the inflow of foreign knowledge into the two.

- **There is no single prescription for developing a successful and competitive biotechnology industry.**

A study looking at the respective industries in the US, Germany, and India suggests that success depends on a combination of various cultural, political, and financial factors. Above all, alignment of these various factors is of particular importance. For example, in terms of policy there needs to be alignment at the local, national, and (in the case of Germany) the broader regional level. Furthermore, public funding is needed to support the development of the industry, but public funding alone does not necessarily produce the desired outcomes. Firstly researchers themselves need to be incentivized to translate scientific advances into commercial opportunities. In addition, investment is also required from venture capital and the pharmaceutical industry. Moreover collaboration among firms and research organizations, both domestically and internationally are key. In particular, an international focus should be encouraged, and international cooperation supported. Finally, entrepreneurial orientation is also beneficial.

- **As healthcare spending rises, healthcare technology payers will likely seek tools to determine how best to allocate their budgets.**

In recent years there has been a significant rise in healthcare spending, both as a percentage and in absolute terms, particularly in the BRIC countries. In light of this, those who pay for healthcare technology need tools to determine the value of innovations and reimburse the innovations accordingly. They need to consider clinical and patient benefits, their own budgets, and value for money. Consequently the development of formal health technology



assessment systems and other cost-control strategies for formulary management have grown in prevalence.

- **New business models have emerged in the pharmaceutical industry in response to changes in the healthcare field.**

Pharmaceutical firms have had to adapt to the growth in health technology assessment use, which has brought with it a trend towards decision-making at the institutional level rather than the physician level, and also a focus on real world value evidence to differentiate products and justify price. As a result, firms have had to restructure commercially and hire a more educated sales force. In terms of R&D, firms have had to increase research efficiency, conduct more focused research and reduce costs. Furthermore there has been increased investment in conducting trials in developing countries, where development phases are faster and there is an opportunity to capture the population of a growing market. There has also been medical organization restructuring, with greater emphasis being placed on customer-oriented medical research, real world value evidence, and proactive safety research to preemptively detect issues.

- **External collaboration by pharmaceutical firms may transform the industry.**

In future, there may be greater collaboration among payers, industry, and patients, to facilitate net pricing, risk sharing, performance guarantees, and greater negotiation for better access and copay arrangements. The development of an innovative access program would make it possible to reach a broader section of the population. This could include the provision of targeted supplementary health insurance programs, or paying for upstream diagnosis costs to identify the right patients for personalized medicines. Finally greater external collaboration can strengthen value-based approaches involving value evidence generation, packaging and communication, which can help differentiate products and technologies from those of competitors and better justify formulary coverage.

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- **A shift in perceptions is needed to make biotechnology and pharmaceutical innovations accessible to a greater part of the population**

Firstly, there is a need to change the attitude of society to healthcare. People must fully appreciate the value of people's health and lives and understand that it is the responsibility of society to safeguard the health of its people. Secondly, developers are often driven by their own research interests and projects. Instead, more consideration should be given to application and the actual benefits from the development stage.



**UNIT 3 “Challenges in  
Managing Healthcare:  
Who Pays for Healthcare  
and How Is It Supplied?”**

### **UNIT 3 “Challenges in Managing Healthcare: Who Pays for Healthcare and How Is It Supplied?”**

Each country has to answer the questions of who pays for healthcare and how it is supplied. Unit 3 addressed the theme of “Challenges in Managing Healthcare: Who Pays for Healthcare and How Is It Supplied?” The major findings of this unit were that there is no perfect combination of public and private financing, as the situation is different according to economic evolution, cultural background and patient needs in each region.

#### **Plenary Address: Can health become an even bigger part of the economy without undermining fiscal sustainability?**

Speaker: **Ms. Yuki Murakami**, Health Economist/Policy Analyst, OECD

#### **Overview**

The burden of healthcare spending shows an increasing trend, and governments need to address health sector productivity, a focus on prevention, and the appropriate balance of public and private sector healthcare in order to achieve long-term sustainability.

#### **Key Takeaways**

- **Health is growing as a share of government budgets**

Health spending is likely to continue to grow as a share of the economy, requiring improvement of value for money, reallocation of public funds from other areas, or increasing private funding. The growth rate of health spending exceeded average annual growth rate of the whole economy in almost every country between 2000 and 2009. Improving health sector productivity can dramatically change the fiscal outlook. To gain efficiency and fiscal sustainability, finance ministers want to reduce hospital expenditures and pharmaceutical costs. However, this does not correspond with the reality, which is that hospital spending has been increasing, while spending on prevention has fallen.

- **Careful consideration should be given to the best combination of public and private healthcare services**

Private health insurance markets have theoretical advantages including expanding individual choice, and spurring innovation and flexibility, but there are associated risks such as higher administrative costs, and risk selection. More effective cost sharing can be achieved by specifying selected services for private coverage, and better analyzing cost effectiveness to assess whether a new service or drug should be funded.

- **“Sin taxes” can be effective in improving overall health**

Some new taxes could be effective in improving health, but will not be major sources of revenue. “Sin taxes” are increasingly being used by OECD countries, targeting lifestyle choices that can affect productivity and employment outcomes. The arguments for using taxes to attain public health objectives are strong for tobacco products and alcohol.

### **Plenary Panel: Challenges in Managing Healthcare: Who Pays for Healthcare and How Is It Supplied?**

Moderators: **Professor Bernd Helmig**, University of Mannheim Business School

**Professor Shigeru Tanaka**, Keio Business School

Panelists: **Professor Wen Chen**, School of Public Health, Fudan University

**Ms. Yuki Murakami**, Health Economist/Policy Analyst, OECD

**Dr. Alberto Jose Ogata**, President, Brazilian Quality of Life Association

### **Overview**

While there are certain common issues such as funding limitations, availability of skilled human resources in rural areas, and moral hazard related to free healthcare access, measures taken to address the issues must be appropriate to the situation in each country.

## Context

Participants discussed the major challenges in managing healthcare in each region, and issues around funding and delivery of healthcare.

## Key Takeaways

- **Measures must be relevant to the situation in each country**

The health system is dynamic and each economy will try to establish a system that is appropriate to the local context and meet local policies. Much can be learned from OECD countries but it must be understood that measures are context dependent. Chile and Mexico are part of the OECD, but share the same problems of fragmentation as Brazil and the Latin America region as a whole, and therefore a regional scheme should be considered to cooperate in addressing the issues. There is no blueprint of an ideal healthcare system, but good systems have vision and long-term strategy, build consensus, achieve synergies, and demonstrate openness to cooperation between public and private sectors.

- **A degree of cost sharing may be effective in reducing overutilization**

There is no free system, as everyone is paying in some way, through tax contributions. Overutilization may occur with access to free care services, and therefore a small cost sharing element is useful as a gatekeeper to reduce overutilization. There is a higher probability of overuse in cities with great resources.

- **Cost increases, regional and socioeconomic inequalities, and rising expectations are seen as the key issues in China**

The main problems experienced by China are cost increases exceeding GDP growth, and inequalities in healthcare across regions and socioeconomic groups. Healthcare expectations are growing, despite downward pressure on costs. Universal health insurance coverage was achieved in a very short period in China, but there is still much to be done in terms of extent of services. One area to be tackled is how to integrate different health insurance schemes to achieve equality in services among the different schemes. There is also an effort to define the essential healthcare package that all regions should provide.

- **While Brazil has universal coverage of the population, insufficient government funding results in incomplete service offerings**

The constitution of Brazil recognizes health as a right of all citizens, which is the basis of the unified health system that provides universal free healthcare entirely funded by tax revenues. The public system is underfunded by the government, resulting in incomplete service provision. However, there is a very efficient program of vaccination, which covers the entire population, and a very good program for HIV/AIDS offering free treatment for the whole population enabling good control of the epidemic.

- **An appropriate balance of public and private sector health can stimulate competition resulting in improvement of the healthcare system**

In service delivery, China relies heavily on public health institutions so there is little competitive environment. China's solution is to try to develop the private sector to increase the efficiency of the healthcare system. The patient should serve as the captain of the system, which implies that there should be some degree of market orientation, with liberalization and competition aspects.

- **Lack of skilled human resources in rural areas can be a significant issue for larger countries**

In larger countries, such as Brazil and China, there are often problems with lack of professionals in some areas, which in turn requires relocation of professionals. Recruiting professionals to rural areas is often not sustainable, as turnover may be high, and if institutions do not have knowledge of each patient it is difficult to effectively provide effective services for chronic diseases. China addresses this issue mainly by transferring staff from the central government to local governments.

### Parallel Session 3.1: The Stakeholder's Roles: All Power to the Patients?

Moderator: **Professor Michael Woywode**, University of Mannheim Business School

Speakers: **Dr. Eishu Hai**, CEO, Medixfirm Co., Ltd.

**Professor Bernd Helmig**, University of Mannheim Business School

**Mr. Eisuke Suzuki**, CEO, Medical Insight Company

#### Overview

Better health outcomes can be expected by focusing on patients' perception of control, effective communication of information, and assistance in the selection of healthcare provider.

#### Context

Participants discussed the role patients play in the decision making process, and how can they be made to feel more in control of their treatment.

#### Key Takeaways

- **Perceived control leads to better outcomes**

When people experience high perceived control exert effort and initiate actions, feelings are improved, outcomes are improved including QOL, and behaviors. On the other hand, when people perceive control as impossible they become passive, fearful, pessimistic and distressed. A theoretical framework based on screening of hundreds of journal articles provides the following implications

- Medical service providers should consider health-related control perceptions when designing service processes
- Those designing health policies should use information provision as a powerful tool to enhance health-related control perceptions.

- **Patients may require greater assistance in the choice of provider**

Patients need power most in the case of diseases which are chronic and severe, such as cancer or HIV. The patient's journey can be a long process starting from choice of provider and continuing through to daily life management and possibly end of life care. There are

problems for patients in selection of provider due to large number of options and no clear logic for selection. New technology, including social media might not really help, as there is often misinformation and bias. Some way to assist with matching of patients and doctors may be required.

- **Effective communication skills are fundamental to good medical quality**

In Japan, some patients feel that doctors should make the final decision. Nevertheless, good communication is fundamental to good medical quality and outcomes. Doctors may want to communicate more, but due to large numbers of patients and administrative overheads, three hours waiting for three minutes service is common. Doctors have a responsibility to provide explanations using non-technical vocabulary, but there is normally no training given in this area. An experiment has been undertaken for education supporters from the community to help young doctors to better understand communication.

There are some patients who fear being in control, in which case information must be provided and a decision taken for them. In this case, the difficulty is ensuring that the patient continues with their treatment program, which requires empathy to ensure that the patient is convinced of the decision. The gap between educated patients and uneducated patients is becoming wider, and therefore doctors need to be able to deal with a wider range of situations.

### **Parallel Session 3.2: Productivity and Cost: What Do we Pay for and Invest in?**

Moderator: **Professor Hiroshi Nakamura**, Keio Business School

Speakers: **Mr. Mitsuru Kikuchi**, Chugai Pharmaceutical Co., Ltd.  
**Professor Gerard de Pouvourville**, ESSEC Business School  
**Professor Jonathan Skinner**, Dartmouth College

## Overview

Advancements in technology have contributed to increased productivity in the healthcare sector. They have also led to a significant increase in costs. To balance “productivity” and “costs,” society must decide what we will pay for and how we will invest our resources.

## Context

The participants discussed how public and private payers alike will attempt to assess innovations in health according to their value for money.

## Key Takeaways

- **The choice of how to measure both costs and benefits has an obvious impact on results**

The results of assessing costs and benefits are not only based on what is measured, but also on what is not measured. A major difficulty is how to take into account any benefits and costs beyond the healthcare system.

- **Most agree on covering costs of healthcare services to treat patients, but do not necessarily agree on how to value it**

Many would focus on direct medical costs but may not agree on how to value the cost of appliances, time spent by the patient because of delivery of treatment, or the opportunity costs of caregivers. What is the potential cost of illness on domestic or salaried work? We can measure the impact of sick leave if we have good information systems, but measuring productivity in the workplace when you are ill can be more challenging. How do you estimate the costs for society of having for example a young population being partially incapable to work?

- **The cost borne by other institutions due to illness are not usually taken into account**

Services which are covered by different payers, such as institutions that pay for healthcare, rehabilitation, social services, or compensation, are not usually involved in the decision making on coverage.

- **The healthcare industry may not be investing in the right products or services**

There is room for innovation in appliances and devices, but this raises the issue of the funding of such innovations. Most innovations are poorly covered or are covered by other payers.

- **Innovation is leading to unsustainable growth in healthcare costs**

Everyone loves innovation, but can we actually pay for all this innovation? Japan is facing serious financial issues it has to confront to keep the healthcare system from collapsing.

“Japan has been resorting to patchwork reforms over the past decade to prevent the healthcare system from collapsing as a rapidly graying society demands more funds from an ever-shrinking pool of tax revenue” – *Ayako Mie, The Japan Times, August 23, 2013*

- **The balance between new technologies with uncertain or low benefits and technologies that are cost effective and benefit a large number of patients will be a big challenge for governments and insurance companies**

Innovations that are expensive to purchase or maintain can cause pressures to recoup expenditures, not only significantly impacting costs but diagnoses as well. Expensive technology with minimal benefits is, in the long term, not a good business investment. And typically, the things that save lives are not the things that cost the most.

“Radiation oncologists have gotten themselves into a trap... They’ve built very expensive centers, and the only way they can recoup costs is to treat lots of prostate cancers. A lot of men are going to be channeled into proton therapy, not necessarily to their advantage, at a very great cost.” – *Robert Langreth, Bloomberg News, March 26, 2012*

- **To measure benefits versus costs, information systems are important**  
You need information not only for cost effectiveness, but to create good public health policies. And you need good information on resource use to have good management of hospitals and services. If your government wants good policy, you have to invest in information systems.

### **Parallel Session 3.3: What Is a Better Healthcare System Like?**

Moderator: **Professor Shigeru Tanaka**, Keio Business School

Speakers: **Professor Wen Chen**, School of Public Health, Fudan University

**Ms. Yuki Murakami**, Health Economist/Policy Analyst, OECD

#### **Overview**

Most countries seek to provide universal health coverage (UHC) to its citizens. However there are more components to UHC than simply access to healthcare in the event of an illness, one of the most important of which is financial risk protection. Moreover, even if a population is universally entitled to healthcare, actual health coverage can be impeded by a variety of factors. These need to be addressed as well. While public financing is essential for the provision of UHC, healthcare continues to grow increasingly expensive. Moreover following the global financial crisis, growth in healthcare spending has slowed dramatically in many countries, with public spending particularly hard hit. As such, governments have had to reassess the level of benefits provided, and the payment systems involved.

#### **Context**

The participants examined the different components of UHC and the challenges of achieving it, looking at the specific examples of the OECD countries and China.

## Key Takeaways

- **UHC is not simply a matter of universal access to healthcare.**

UHC begins with equal access to care irrespective of ability to pay. At the same time, access to prevention, promotion and rehabilitation is also key. In addition, UHC should also provide a level of financial risk protection to prevent excessive out-of-pocket (OOP) payments or impoverishment due to unexpected illness. Furthermore, there is a need for an adequate supply of health workers with the right skills in the right locations, as well as high quality healthcare services with appropriate information systems, and safety regulations for pharmaceuticals and medical devices. In the OECD countries, public coverage plays a significant role to ensure UHC, while it is very difficult for the provision of private health insurance to achieve this.

- **There may be a gap between healthcare entitlement and actual health coverage.**

Although almost all OECD countries have achieved UHC for basic needs, a gap between healthcare entitlement and actual health coverage likely still remains. Under a UHC system, the population should be entitled to disease prevention, health care services, and medical goods, among other health benefits. However, the actual level of healthcare coverage is dependent on a number of factors, including the availability and affordability of health care services and goods, and also social barriers to healthcare utilization. Moreover, while one would assume low levels of OOP and catastrophic spending in relation to healthcare in OECD countries, in reality, OECD data shows that there are unexpectedly high levels in some countries.

- **Growth in healthcare expenditure declined significantly following the global financial crisis.**

Despite strong growth in health expenditure in OECD countries leading up to 2009, there was a large drop in growth following the global financial crisis. This has primarily been driven by cuts in public spending on health as governments reexamine and amend the depth and breadth of the benefit packages they provide. These cuts have produced significant spending reductions in all sectors, especially pharmaceuticals and prevention. In response to the cuts in



public spending and healthcare packages, there has been somewhat of a shift to private financing, with private health insurance picking up some of the slack.

Looking at the affected countries, OECD data shows that countries where public healthcare spending is largely funded by general taxation were more adversely affected than those where spending was funded by social insurance. Health expenditure actually contracted in some countries, with Greece and Ireland the most heavily affected. On the other hand, health expenditure in Israel, Japan, and Korea has been largely unaffected and continues to grow.

- **In recent years there has been an urgent need to reform China's health system and health sector.**

Compared to countries like the US and Japan, China has lagged behind in terms of the health status of its population, healthcare infrastructure and workforce, and health expenditure. Furthermore, China's health system has been characterized by institution-based delivery with many public hospitals and institutions incentivized to promote high-tech services and pharmaceutical sales in the interest of revenue generation. Additionally, the government's social health schemes have played a limited role of ensuring that purchasing on behalf of the insured is conducted in a strategic manner. The most urgent issues that need to be addressed are unaffordable access resulting from rising healthcare costs, inequalities in healthcare across regions and socioeconomic groups, and growing expectations among the population.

- **The Chinese government has since made progress in achieving universal health insurance coverage and improving equity in financing and service utilization.**

The Chinese government has sought to guarantee universal access to basic health care for the entire population and effectively reduce medical expenditure burden. There has been increased health expenditure in terms of public health services, medical education and research, infrastructure development and subsidy provision for public health institutions, and the co-financing of urban and rural insurance schemes with a focus on the urban unemployed and rural farmers. As a result, almost 100% of the population is covered by universal health insurance and hospitalization expenditure reimbursement is close to 50%. In addition to the mobilization of resources on the part of the government, the development of social and private insurance schemes has also helped increase personal contributions to healthcare. Other successful reforms have included the establishment and development of incentives such as service purchasing mechanisms, and assessment of quality and efficiency by public hospitals and suppliers. In addition, new technology has been introduced and promoted, helping to raise the quality of healthcare.

- **Problems in health financing still remain in China's health system.**

Although universal healthcare has largely been achieved, it is difficult to provide healthcare coverage in a sustainable manner to informal workers and migrants and rural areas. Furthermore, voluntary enrolment in public insurance schemes may lead to adverse selection issues. Another major issue is difficulty in achieving equality in financial risk protection. There continue to be significant variations in contribution level and benefit packages among different schemes. Moreover medical expenditure has risen rapidly as a result of the fee-for-service method of medical care payment, and the failure to integrate primary and tertiary care. As such further reforms in payment and services delivery are required.



- **Elderly care is a growing concern for many countries**

In China and Japan in particular, the aging of society is progressing rapidly and elderly care is an urgent challenge. In China, there is currently no distinction between medical services and elderly care, with the elderly receiving both at hospitals and community health centers. As such, China is now trying to follow the example of other countries and is developing long-term care insurance and establishing special institutions for non-clinical elderly care. As for the OECD, in most countries medical services are separate from long-term care services, and many countries have established their own funding schemes and services to provide long-term care services to the elderly.

## Closing Address: At the forefront of hyper-aging societies

Speaker: **Mr. Genki Oka**, Partner, McKinsey and Company Tokyo Office

All of the participating countries in this forum are ageing societies, and the topic is occupying a lot of mindshare. The three major themes of this forum are all also significantly influenced by this social phenomenon.

Japan is at the forefront of hyper-ageing societies. Currently 1 in 4 people in Japan are over 65 years of age. By 2030 this will rise to 1 in 3 people. There must therefore be lessons that can be learned from Japan for application to other countries. Japan is expected to face a serious labor shortage in terms of sustaining GDP growth, leading to an increasing war for talent, and the ageing of the workforce leading to increasing leaves of absence due to illness.

Businesses see this as both an issue they need to address and an opportunity. The HR implications are that companies need to value and utilize the contribution of every generation, promote the exchange of expertise and experience, and consider innovative HR policies. Advanced companies have already evolved working models to retain talent.

For the healthcare industry, the growing elderly population will mean increased patient requirements including care services and pharmaceutical requirements, and also opportunities to address unmet needs in adherence, due to the prevalence of single-person households.

In daily life consumption, emerging themes include:

- Relieving anxiety and loneliness
- Effective use of time
- Alternatives to maintain youth



Successful products and services targeting the elderly have unique aspects, such as a shoe design that prevents falls and is easy to put on, or a housekeeping services company doing chores and talking with elderly customers.

Key factors to be taken into account include:

- Do not label seniors as old people
- Tailor to individual needs in detail
- Bring creativity with sense of security and contribute to forming a community on their behalf

Always keep in mind that these customers have the potential to become extremely loyal repeaters.