

WHITE PAPER

# Healthcare Challenges and Trends

## The Patient at the Heart of Care

Quality healthcare is one of the most important factors in how individuals perceive their quality of life. In most countries, alongside the economy, it is the major political issue. In some countries, the healthcare delivery organization is a part of the national identity. CGI believes it is time for a new enlightenment in every aspect of the healthcare ecosystem, where every player, from governments to enterprises to individuals, is involved in improving healthcare. This is part of a series of white papers on key aspects affecting the move toward an Enlightened Healthcare Ecosystem. The other two papers focus on the *Convergence of Health and Pharma* and the need for *Innovation in Health IT*.

## GLOBAL CHALLENGES

Globally, all health economies are facing similar challenges. The advent of new consumer technology is introducing even more challenges, or bringing older ones to the fore. This disruptive technology promotes greater patient power. The most agile and forward-thinking health economies have the opportunity to revolutionize the way care is delivered, and in doing so, to transform their societies. This paper outlines challenges with which we see our clients struggling, and some of the trends we think will impact healthcare for the better.

Among the global challenges that will impact healthcare in the near future are:

### Rising costs

Spending on healthcare almost invariably grows faster than GDP. The rate of growth of healthcare spend has exceeded that of GDP since records began. Moreover, spending and economic recession are closely linked. We can expect to see the rate of growth of healthcare spend in Europe outstrip GDP growth significantly during the current economically difficult times.

Macroeconomic factors like aging populations or insufficient public funding are challenging both receivers and providers of healthcare. Adoption and penetration rates of clinical information systems vary greatly. In fact, the number (and size) of buyers varies from country to country, and is not necessarily dependent on the size of the country but rather on the structure of the healthcare system. Additionally, purchasing behavior is shifting towards more coordinated, joint purchasing.

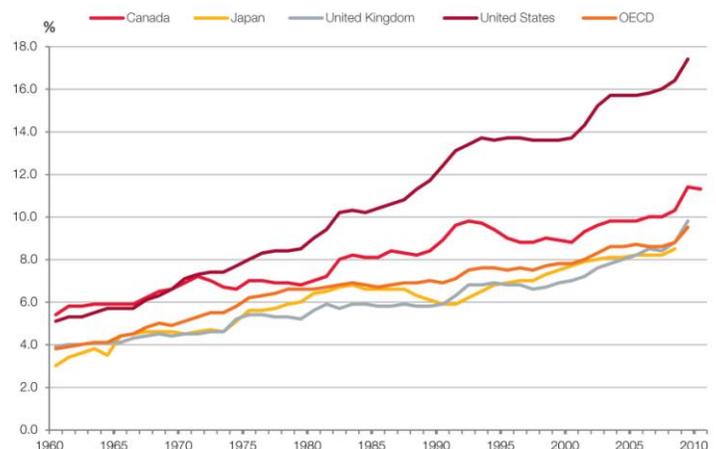
### Changing demographics

#### Service is in demand

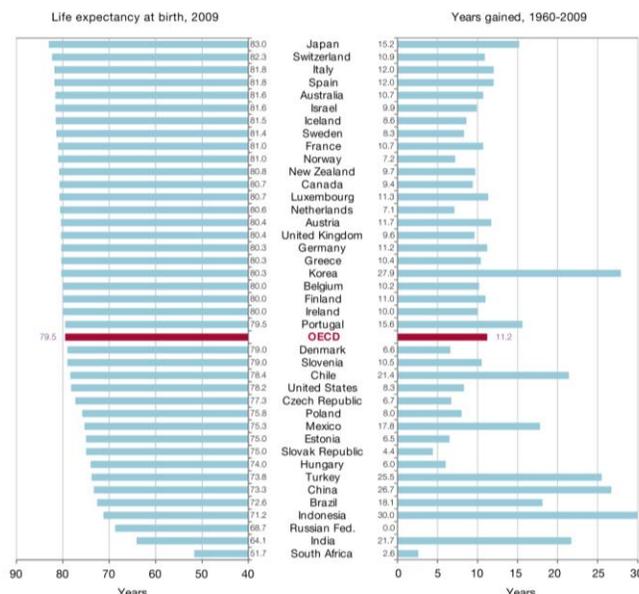
There is increasing demand on the healthcare delivery organizations, and this is happening in every country. People live longer thanks to advances in understanding of the causes of diseases, and consequent improvements in diagnostic techniques and treatments. The average life expectancy in OECD countries has now reached 80 years and continues to lengthen. However, not only are people living longer, but increasingly people are living longer with chronic disease.

**FIGURE 1: HEALTH EXPENDITURE AS A SHARE OF GDP, 1960-2009, SELECTED OECD COUNTRIES**

Source: OECD Health Data



**FIGURE 2: LIFE EXPECTANCY AT BIRTH, 2009 (OR NEAREST YEAR), AND YEARS GAINED SINCE 1960 - Source: OECD Health Data**



### Filling the resource gap

Even as demand increases, there is a global shortage of clinicians.

Countries with the highest number of clinicians per population will need to address graduate intake in to medical schools, which is falling in real terms in many countries. The challenge is not limited to doctors either, as enrollment in nursing colleges has also fallen in some countries.

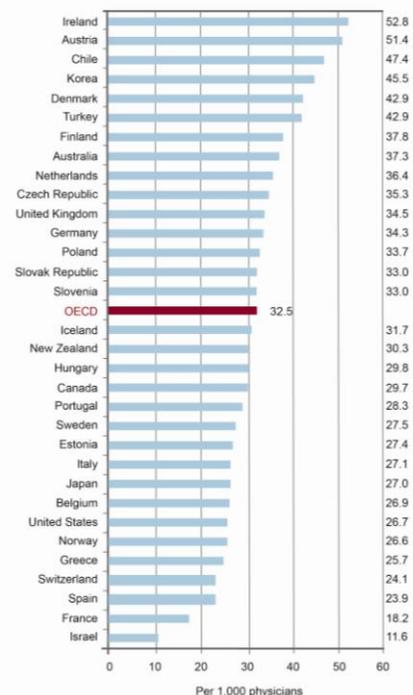
Arguably, a storm is brewing in France, where the number of doctors over 55 is among the highest in the OECD. Combined with an overall reduction in the number of graduates emerging from medical school, France may well see the number of doctors leaving the profession exceeding those entering it. It is generally the case that a skills shortage increases costs (or reduces service quality), so a well-run health system makes sure staff are properly equipped and doing the right tasks for their skills and training. This presents an ethical challenge as some countries seek to fill the gap by recruiting doctors and nurses from other countries, thus depriving those societies of their healthcare professionals.

### Easy access

The graph below shows the distribution of hospital sizes. As demand and spending increase, health economies increasingly will need to balance ease of access to their services against the cost of operating smaller hospitals. For many countries, the rationalization of the healthcare system means the closure of small regional hospitals, which becomes a politically-charged issue. This rationalization also has to take into account the increasing specialization of tertiary hospitals, which is discussed later in this paper.

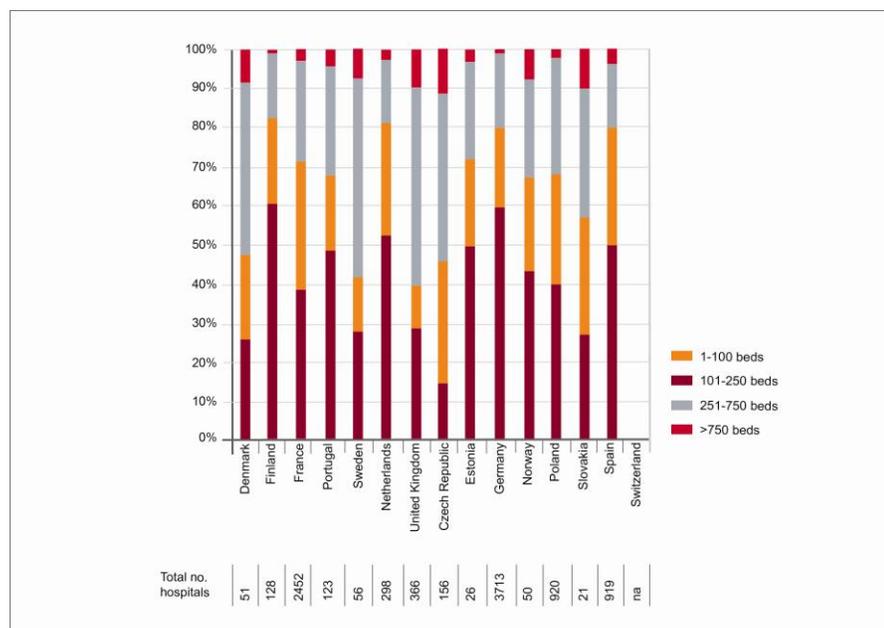
**FIGURE 3: MEDICAL GRADUATES PER 1,000 PHYSICIANS, 2009 (OR NEAREST YEAR)**

Source: OECD Health Data



**FIGURE 4: SHARE OF HOSPITALS BY NUMBER OF BEDS**

Source: Nordic Healthcare Group



## Focus on quality

### What patients expect is changing

The quality of care is increasingly important – as patients begin to exercise their right to choose how and with whom they engage for their healthcare. They demand transparency of data and processes. As a consequence, healthcare organizations will need to focus on how quality outcomes can be published in a meaningful way for patients. Patient safety is the major focus of patient advocacy groups and healthcare leaders. They will enforce deeper investigations of medication errors, hospital acquired infections, wrong site surgery or pressure sores, like never before.

### Becoming customer-driven

#### Where the patient needs to be — at the heart of care

To address the needs of the expert patient, and to start the transition of healthcare to a demand-driven model, some of the world's leading hospitals are placing the patient firmly at the center of everything they do. For example, the Cleveland Clinic in Ohio has a clear mission to improve the patient experience, and has a board-level Chief Experience Officer leading the Office of the Patient Experience. According to their website, the mission is to “ensure care is consistently patient-centered by partnering with caregivers to exceed the expectations of patients and their families.” Cleveland Clinic, along with a handful of other pioneering hospitals, has always been a bellwether in patient care, and it will be interesting to see how many other hospitals make similar arrangements.

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## GLOBAL HEALTHCARE TRENDS

### Move from being supply driven towards a demand driven consumer model

As a society, we are changing rapidly, and this is apparent in the relationship between care providers and the citizen. Patients are increasingly becoming stakeholders in their own care journeys; they demand transparency in access and information about their care and importantly, about the quality of service provided. Citizens are now demanding access on their terms. They want to schedule appointments when and where it suits them, not the provider. They want the latest drugs or clinical trials; and of course, an end to surgical waiting lists. Or they want to be given the option to ‘go private’ without incurring a personal cost.

The Internet is changing citizen behavior. This means the way governments interact with their citizens has to change too. Municipalities are providing more services to the citizen using technology. We will see healthcare providers do the same — adopt technological solutions to streamline processes such as setting up virtual appointments with doctors or looking up lab results online.

Healthcare is the last of the major supply driven industries. It will not be so for long. It will be the citizen that demands the transition to an industry that answers their needs, fears and aspirations.

### Informed patients and the rise of social media

Patients are becoming more and more involved in their healthcare, with a higher stake in the journey than before.

Patients are simply better informed than ever before. Information about medical conditions and treatments are now easily available on the Internet. This has to some extent, shifted the focus of the patient-provider relationship towards the patient. The advent of social media is also driving healthcare interactions in new ways. Patients are exploiting these resources to discuss treatments, procedures and even individual practitioners. Alongside, healthcare practitioners, agencies and charities too will need to use social media to communicate with their citizens; in times of crisis this will become a critical mechanism.

What this means is that healthcare agencies need to have a clear strategy to take full advantage of social media.

### **Patients exercising choice**

Healthcare systems are under close scrutiny by society. With patients having a bigger say in what they choose and demand for, government policy is impacted and in turn, healthcare providers.

Healthcare needs to become demand-driven to satisfy the needs of citizens and governments. Patients increasingly want to decide how and when to engage with their healthcare environment. Governments, health authorities and the medical profession will be challenged to provide patients with the information and services that will allow citizens to make informed choices about their healthcare. This will mean publishing data on indicators of quality (such as outcome data, readmission rates, so on) and also introducing ways for patients to book appointments at hospitals at times that suit the patient, not the provider.

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### **Patient-centered medical home**

Episodic, disease-oriented care in hospitals is not the most effective or efficient way to deliver care. The advent of the patient-centered medical home (PCMH) acknowledges this reality. It promotes care relationships across a spectrum of providers and in a variety of locations, of which the one that is most attractive to the patient is their home. This approach encourages patients to become stakeholders in their care. The care delivery system will be designed so that it fully exploits information technology, helps coordinate care across the community and monitor the patient's conditions, and supports patient awareness.

It is the advances in IT to support real-time monitoring that will make PCMH the norm, the standard clinical practice. Hospitals will be able to discharge patients earlier, because they know that the patient's condition can be continuously assessed, and interventions can take place to ensure acuity is addressed outside of the hospital environment.

### **Hospitals as networks**

#### **Building hospitals without walls; care for patients without borders**

Increasingly, hospitals are part of their communities, and all communities are facing the demographic and disease challenge, as described earlier. Hospitals may have to implement complex, multi-organizational processes to address these challenges in an efficient and effective manner. A shift in paradigm is called for that will mean large, tertiary hospitals building networks of smaller hospitals and primary care clinics. Care can then be divested to these networks, made available closer to the patient's home and therefore more convenient. This model will require coordination of all providers in the network and flow of information to continually manage the care of a patient through time.

### **Personalized medicine**

The practice of medicine has always been based on evidence uncovered through observation. And today, clinicians are at an advantage. There is a host of diagnostic techniques available that allows them to make faster and more accurate diagnoses. Radiology allows clinicians to investigate structures deep within the body, whilst histopathology allows clinicians to investigate tissue samples using microscopes to identify tumors, viruses and so on.

#### **Translational research and the advent of personalized medicine**

Increasingly however, core science is providing new insights for the clinical community, particularly in the field of genetics. Translational research is about how fundamental scientific research benefits patient outcomes, either through the development of new diagnostic techniques, new drugs, or the modification of clinical practice, the latter often referred to as the Bench to Bedside cycle.

To stress the importance of this field, the National Institutes of Health in the United States established the National Center for Advancing Translational Sciences (NCATS) to transform the translational science process so that new treatments and cures for disease can be delivered to patients faster. Similar initiatives are underway throughout Europe and Asia Pacific.

Genetic sequencing offers immense potential for improvements in healthcare. Understanding the molecular composition of each citizen allows clinicians to profile patients for active but undiagnosed diseases. Clinicians will also be in a good position to assess a citizen's disposition to disease in the future, and to devise care plans to ensure the patient's wellbeing is addressed in the most direct manner. This concept of personalized medicine will allow society to move away from treating disease in a "one size fits all" manner. And move to targeted and accurate strategies that will reduce unpleasant side effects and improve health outcomes.

### **CGI CAN HELP**

Governments and healthcare organizations need partners that can help them understand how the healthcare landscape is changing, and how to make the most of the emerging trends and technology,

With deep experience in developing and integrating business, clinical and IT solutions for public and private sector health organizations across Europe and North America, CGI helps clients anticipate challenges and achieve real transformation. Additionally, our client proximity business model promotes understanding of local markets and political environments while leveraging CGI's global capabilities and delivery systems to provide best-fit solutions that are cost-effective and platform-agnostic.

We offer focused expertise and innovative solutions for patient-centric care management, electronic medical records, healthcare administration, health information exchange, health insurance exchange, health analytics, enterprise content management, military health, public health, translational research and pharma and life sciences.

We welcome the chance to be a part of a new enlightenment for each player in the healthcare ecosystem, from governments to enterprises to individuals.

### **ABOUT CGI**

Founded in 1976, CGI is the world's fifth largest independent information technology and business process services firm. CGI has more than 68,000 professionals in 400 offices and centers of excellence in the Americas, Europe and Asia Pacific. Our comprehensive portfolio of services includes business and IT consulting, systems integration, application development and maintenance, and infrastructure management, as well as more than 100 IP-based solutions. CGI defines success by exceeding expectations and helping clients achieve superior performance.