

**HUMANITARIAN &  
DEVELOPMENT  
PROGRAMME**

# **HEALTH IS NEITHER A BUSINESS NOR AN ALGORITHM!**

**By Frédéric BIZARD**

ECONOMIST

DECEMBRE 2016

**« GLOBAL HEALTH » THINK TANK**



“Medicine should not be practiced as a trade” – the public health code (article R4127-19) could not be clearer. Wherever from - health care professional, industrialist, financier or public authority - the comparison between health and commerce has led to multiple diversions, of which sanitary crises are only the tips of the iceberg. While health policy has tended towards commercialisation in recent years, it has neglected incorporate the ongoing, all important digital revolution.

## **PREMIUMS FOR INCREASINGLY MERCENARY DOCTORS**

---

In 2011, a performance-based payment system (ROSP -- Rémunération sur Objectif de Santé Publique) was established which earned general practitioners an average of € 6700 in premiums in 2015. If this system seems appealing, it is simply remuneration for a doctor to do his or her basic job. For example, performance indicators include taking blood pressure from hypertensive patients, measuring the glycated hemoglobin of diabetic patients, and displaying opening hours. We are seeing a move away from ethical standards towards more commercial indicators, thus creating windfall effects without provoking an improvement in practice.

Public authorities have also had a part to play in encouraging doctors to become bounty hunters in ‘medical deserts’. For several years more than 6000 doctors have earned up to 15 000 euros per month for choosing to work in small public hospitals on the periphery – in areas deserted by other medical professionals. These doctors not only impose their re-organisation of services, but also define the conditions of their remuneration – amounting to 500 million euros per year of additional costs to public hospitals. In practice, they have little involvement in the medical process and in the long-term monitoring of the patients, which results in a decrease in the quality and safety of the care.

The aforementioned public authorities are now keen to extend this system to urban centres. The medical agreement signed in August 2016 “further incentivises doctors to ‘medical deserts’ at all costs” – a cost which has been designated at a flat rate of 50,000 euros. If these mercenary doctors fill vacancies in nearby hospitals, this premium increases further. However, these funds must come from somewhere, and this messy health policy has decreased the quality and value of consultations, which will only increase ‘medical desertification’. As for the mutual healthcare networks defined in the Le Roux law of 2013, these are based on the premise that health is a mass consumption good and that by multiplying volume, the incomes of health workers is maintained, while margins are decreased.

In addition to the commercialisation of health is the digital revolution which is transforming all sectors, including health, and posing a major challenge to health professionals. The state has also failed to harness the power of the digital revolution.

## **BRINGING THE DIGITAL REVOLUTION TO THE HEALTH SECTOR**

---

From a digital point of view, the French health system is archaic to a point of embarrassment. From computerized hospital services and personal medical records to secure messaging and telemedicine, public authorities have succeeded in freezing national healthcare in a pre-internet era. Despite a law in 2009 and a decree in 2010, telemedicine is still not in common use. The legal acts lack financial backing and the obligation to set up contracts with individual regional health agencies complicated matters unnecessarily. The recent proposal from insurers to test telemedicine on less than 10% of the national territory, highlights the lack of understanding and urgency in the digitalization of health. What convincing do governments need in order to push the development of these technologies? It is not a lack of resources, but political leadership and decision making that is missing in this regard.

The actions of our political leaders are indeed defined by an absence of strategic vision on the future of our health systems. The laws of 2004, 2009 and 2016 were conceived of reactively, in response to specific events, rather than in an attempt to adapt our health system to respond to a wider, changing environment. This strategic immobilisation has put traditional health actors at risk of being affected by new actors, especially those coming from the digital sector. Those most at risk will in reality be those whose activities are not focussed on their real added value. For example, the pharmacists follow an economic model based on the distribution of inventory and the management of logistics, which is often far removed from scientific expertise. A logistics specialist like Amazon is already capable of turning any pharmacist without dispenser into a deliverer of medicines in the best conditions of security and reactivity. The pharmacist would only have to work on retaining customers and promoting his or her business.

Despite this real risk, the 'uberization' of health reveals certain fantasies of technobeats and certain lobbyists.

## **THE MIRAGES OF ALGORITHMIC AND 'UBERIZED' MEDICINE**

---

It has often been said that artificial intelligence will soon substitute medical expertise and that American web giants will control the algorithms and decision making platforms that will shape medicine in years to come. At best, doctors will serve as useful medical

engineers, and at worst as social workers with a useless degree. Indeed according to American futurologists and giants of High Tech, we are entering an era of transhumanism.

"Genetics are not providence ... gene therapy is a very elegant therapy but is limited number of diseases ... less than a hundred children globally have treated by gene therapy to date... everyone carries 50 to 100 genes associated with genetic diseases without being ill ... aging cells are unable to rejuvenate. Medicine will never defeat death." These remarks by Professor Arnold Munich<sup>1</sup>, an unquestionable expert of genetics, illustrate from medical standpoint, the limits of the risks associated with medical uberization risk. These limits are also to be found with looking at the issue from an economic standpoint.

In recent years, the United States has seen the growth of demand-driven healthcare companies providing telemedicine, home visits and drug delivery services through digital platforms<sup>2</sup>. The economic model for on-demand health care is much more complex than on-demand services in other sectors. For example, the number of transactions per year per user of the service is very low (4 physician visits per year in the US versus 100 for Uber) and the higher gross revenue per transaction (40 to 200USD compared to 25 USD) does not compensate for the lower volume of service use. In terms of human resources, qualifications are higher and therefore qualified staff is harder to find. As for marketing, the potential for this kind of service to go 'viral' is low due to the reluctance of users to publicly discuss their health issues – which significantly increases the cost of acquiring clients. Another challenge is that citizens rarely pay for their health costs immediately (rather paying later through insurance mechanisms) – though this would be the best way for on-demand services to be paid for. The adoption of an on-demand health service will be determined by the reliability of the service and its cost, as opposed to in other sectors, where novelty and practicality are key determinants. Home visits by doctors are also limited quantitatively (maximum 10 visits per day on average in the USA) and qualitatively (minor interventions only). Home physician services have existed in France for a long time alongside SOS medical services, without threatening the existence and use of office consultations.

National health policy in recent years has played a role in transforming healthcare into a consumer good like any other, at the risk of eliminating the notion of solidarity that sits at the heart of the public health system. The missed digital revolution in the health care sector in the context of a society that is quickly and forcibly digitalizing every aspect of

---

<sup>1</sup> Professor Arnold Munnich is head of the genetics department of the Necker-Sick Children Hospital and co-director of the Imagine Institute for Research on Genetic Diseases. He is the author of « Programmé mais libre, les malentendus de la génétique », Plon, 2016.

<sup>2</sup> The on-demand healthcare market in the US has been estimated at USD 700 million since 2011 and has grown 300% per year since 2014. Examples of companies within this sector include: American well, Avizia, Carena, Chiron, Doctor on demand, First opinion, Grand opinion, healthspot, heal, pager, Vytalis, firstline, postmedrex.

life, allows one to better understand the identity crisis which healthcare professionals are experiencing today.

Fear is always a bad advisor. It will be up to health professionals to reaffirm their strong ethical principles and bring about a cultural revolution, which makes medicine even more effective and valued in the future, for both the users and the wider community! ■

# HEALTH IS NEITHER A BUSINESS NOR AN ALGORITHM!

By

**Frédéric BIZARD**

ECONOMIST

DECEMBER 2016

## « GLOBAL HEALTH » THINK TANK

Directed by Nathalie ERNOULT and Dr. Anne SÉNÉQUIER  
ernoult@iris-france.org – senequier@iris-france.org

*A Think Tank under the*

## HUMANITARIAN & DEVELOPMENT PROGRAMME

Directed by Michel MAIETTA, Senior Research Fellow at IRIS  
maietta@iris-france.org

© IRIS

All Rights Reserved

INSTITUT DE RELATIONS INTERNATIONALES ET STRATÉGIQUES

2 bis rue Mercoeur

75011 PARIS / France

T. + 33 (0) 1 53 27 60 60

contact@iris-france.org

@InstitutIRIS

[www.iris-france.org](http://www.iris-france.org)