

PANELISTS DEBATE 1

Patrick NICOLET, Capgemini's Group Chief Technology Officer

Thank you, Alexandra, for a very lively presentation. I liked it very much and I now expect some reaction from the other participants. Do you have some questions on this first topic of who is in the driver's seat when it comes to healthcare?

Jacques BIOT, Board Member & Advisor to companies in the field of digital transformation & AI

I would like to comment on two of the points that Alexandra made. One of them is the fact that, of course I am a great believer on therapeutic innovation, and I have been pushing it all my life. Basically, it is not the only determinant of health. For example, if you look at stomach cancer, the refrigerator was the solution that brought an end to stomach cancer, not the pharma industry. Still, great tribute to the pharma industry. Alexandra also mentioned antibiotics, for example, as having some issues. If you look at research today, very little is done on antibiotics and I would say simply for economic reasons. If you are a pharma company and obliged to return good profits to shareholders, you will never go into that field because you know that antibiotics will not be priced at a high level and they are usually used for a week, so that is not a business. At the same time, where we say there may be very dangerous pathologies, the next epidemic may not be viral but bacterial because there will be resistant bacteria and we will be caught out because nobody has pushed for research into antibiotics.

When it comes to the cost of human life, Alexandra is right that there is a price, and it is not the same for everyone. For example, if you look at the British, they decided they would not reimburse drugs if they cost more than GPB 20 000 to GPB 30 000 per quality adjusted life year. After making this decision, all the enzyme replacement therapies arrived, which cost much more and so the Brits had to make a special envelope. That means that you price the life of a child with an enzyme deficiency much higher than somebody else. That is really one of the issues that society is facing, and this debate has not been brought to the public. It is a debate that remains within the hands of a view specialists who debate what to reimburse but the public is never asked what they want, maybe because the public want everything.

Patrick NICOLET

As we see in other areas. Before we move to the next topic, building on this I would say that both of you, Jacques, and Alexandra, said that in fact no order is given. It is a kind of self-organized industry, it is a bit of a caricature, but that is very dependent from one country to another. It may be very good because the sensitivity about healthcare varies enormously depending on your culture. We understand the waste and that is what you said. We understand that we need to do it. Everybody knows that it is one of the biggest policy issues for every government. Jacques, you called for establishing the matrix. Alexandra, you were more about categorizing the type of innovation and focusing on at least three agenda. How do we start? We know it is a very complex challenge, so where do you suggest we start?

Alexandra PRIEUX, President of Alcediag. Founder of SkillCell

That is a quite complicated question. Starting to organize a world that has never existed. I think I would agree with Jacques Biot in that there is no point in trying to organize when you do not know what you are trying to organize. Today, we do not know, we only know that it is the law of the market that, in the end, more or less regulates the whole industry and that is exactly what happens with antibiotics. I would



say that perhaps organizing and getting some metrics so that we can have a clear understanding of what is going on and I would add also perhaps having a clearer view of what we can do.

Jacques BIOT

The OECD has just published a very interesting report, Health at a Glance, where they provide a number of performance indicators for various healthcare systems. It is very strange to see that performances are extremely different from one country to another. Countries have set some kind of priorities, but it is unclear if this was an explicit decision or whether it is just because there was a drift of the whole system in that direction.

My point is that we basically need to develop research, as I said, in epidemiology and health economics, but also education and probably to educate the public. The previous panel talked a lot about disinformation, and I think that is a field where people do not really understand the basics of the economics. They do not know how many drugs are in development, what budget is allocated, and they do not realize that resources are scarce. We need more public debate, but I would say at the world level. The WHO does a great job in collecting data and fostering specific plans, but Alexandra mentioned malaria and that is a really good question, so maybe more money is needed. Malaria kills more people than COVID, so why has there not been a big effort on malaria apart from the Bill & Melinda Gates Foundation and with the limited outcome Alexandra mentioned?

Where should this debate take place? First, probably in countries at parliamentary level and then this would require education for politicians, probably followed by multilateral discussion. There has been big progress. We have seen that the COVID vaccines have come from all over the world and that is basically the outcome of work that was done 20 to 30 years ago, when I was very young, with the ICH, the International Conferences on Harmonization. All administrations worked together along with industry to define what they would be expected to register for a drug. This is why today you can register a new drug all over the world at the same time. We need more consultations like that at international level on what are the big issues in terms of health. That is why I think Thierry's initiative is so important and why we need to push it to the next World Policy Conference.

Patrick NICOLET

I can see a comment from Stanislas on the cost of life and I think that leads to the next debate. I do not intend to summarize but if I retain one idea, I think what I hear is that you are basically saying we lack transparency in the way this market operates. Of course, the fact that there is no clear order giver is the initial sin but the lack of transparency and possibly, as Alexandra alluded to, some topics that are difficult to talk about in society today. We saw during the last COVID crisis that some topics are not welcomed as part of the conversation as they might have been before, such as the cost of life and that it is sometimes necessary to make choices, and they tend to happen more randomly.

The next topic is whether the end can justify the means, and this obviously raises a question of ethics, but not just that. We can see there is a problem with transparency, of open conversation and what we can and cannot talk about. For this session, I am pleased to have with us Daniel Andler, who is an Emeritus Professor at Sorbonne University, Member of the French Academy of Moral and Political Sciences. He will be accompanied by Arthur Stril, who is a Vice President of Corporate Development at Cellectis, a biotechnology firm and a member of the Corps des Mines.

Daniel, I will let you set the scene for this debate.