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Artificia

GE HEALTHCARE SPECIAL SUPPLEMENT

ARTIFICIAL HYPE, L. DONOSO-BACH

AI IS THE NEW REALITY: THE 4TH HEALTHCARE REVOLUTION IN MEDICINE, I. A. WEISSMAN ARTIFICIAL INTELLIGENCE IN HEALTHCARE: WHAT IS VERSUS WHAT WILL BE, R. PEARL WILL AI LEAD TO JOB CUTS OR WILL THE TECH IMPROVE WORKING LIVES? L. FLORIDI ET AL. AI OPPORTUNITIES FOR HEALTHCARE MUST NOT BE WASTED, L. FLORIDI AI-BASED PREDICTION IN CLINICAL SETTINGS: CAN WE TRUST IT? W. LEODOLTER ARTIFICIAL INTELLIGENCE: A NEXT WAY FORWARD FOR HEALTHCARE, R. CORBRIDGE AI IN MEDICAL IMAGING MAY MAKE THE BIGGEST IMPACT IN HEALTHCARE, M. COLANGELO & D. KAMINSKIY FUTURE OF ULTRASOUND: WHERE ARE WE GOING? P. SIDHU THE AI-POWERED RADIOLOGIST, M. J. D. CANDAMIO CLINICAL ULTRASOUND IN THE AGE OF ARTIFICIAL INTELLIGENCE, D. A. LICHTENSTEIN AI APPLICATIONS IN BREAST IMAGING, J. TEUWEN ET AL.

NYC GO RED FOR WOMEN MOVEMENT: STEM GOES RED.

C. BEECHER

TRUST-ABUNDANT TEAM PRINCIPLES, E. E. SULLIVAN

UNDERSTANDING BAD COMMUNICATION, M. KEEN

VALUE-BASED HEALTHCARE AND THE DOCTOR-PATIENT RELATIONSHIP. M. GAFANOVICH

NURSING ON THE MOVE: CROSS BORDER HIRING, I. MEYENBURG-ALTWARG

HOW FOLLOWING STEPS FOR **OUALITY IMPACT HEALTHCARE** CONSUMERISM, P. FAGBENRO

THE "ONE STICK STANDARD" FOR VASCULAR ACCESS. N. NIKHANI

CRITICAL ANALYSIS OF MRI-BASED CLASSIFICATION SYSTEMS FOR SPORT MUSCLE INJURIES, J. ISERN-KEBSCHULL ET AL.

REVITALISING THE AGED HEART THROUGH SPERMIDINE-RICH DIET. M. ABDELLATIF & S. SEDEJ

THE ROLE OF SOCIAL MEDIA IN CARDIOLOGY, V. VASSILIOU

ACHIEVING ZERO AVOIDABLE PATIENT DEATHS BY 2020, K. MCQUEEN

INNOVATION IN PAEDIATRIC REHABILITATION, M. BEERI & E. BE'ERI



Al opportunities for healthcare must not be wasted

The reality about the potential and limitations of AI

One of the world's leading authorities on the ethics of Artificial Intelligence provides an overview on how the technology could impact healthcare and warns of opportunities not to be missed.



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am reasonably optimistic about the opportunities that Artificial Intelligence (AI) presents. But I am not so optimistic about our ability to seize those opportunities. If only we could do the right thing, the outlook could be amazing. But are we going to do the right thing? I am not so sure. The fact is, presently, we are misusing and under-using Al.

I come from decades of experience in the field of philosophy of AI and people who are waking up to the issues it poses, such as ethical challenges, right now are frustrated at what appears to be slow progress in the field. However, people like me, who have been in this field for a very long time, are actually delighted that governments and society are finally paying serious attention to the situation. At least, this is a good step forward. After all, publications on the ethical impact of Al date from the 60s. Or, to take another example, the car industry has been automated for decades. A lot of our problems have been brewing for some time. The difference is that now they affect and are felt by many people.

Nowadays, we can see serious engagement from medical industries such as pharma and healthcare wearables, all the way to governments, research agencies and international institutions. The mushrooming of initiatives is a good sign. But, while this is wonderful to see, in the excitement about AI, what is somewhat missing is the acknowledgement of the presence of a wealth of research and investigation which is already there. We don't need to reinvent the wheel.

Yes, caution is essential, because the impact of Al in healthcare could be deep both in a good and in a bad sense. Some people like to use the word "careful." I like to use the world "mindful." We should not be timid and afraid. Let's look at what can be done safely and in a socially acceptable way, and let's be ready to redress and change direction as soon as a mistake appears. We need to pursue innovation in tandem as well to balance this out. But let us not miss great opportunities just because we have been sold some scaremongering stories and sci-fi scenarios.

The shift from careful to mindful underlies the belief that AI is a powerful force for good. A lot in this technology is being developed by humans for humans to improve our lives. I am sceptical about 'better-safethan-sorry' being the only approach. We need to find ways of testing new ideas and solutions safely but also innovatively because there is so much more that we can and should do to improve the lives of billions (ves with a 'b' not an 'm') of people.

Governance of AI lagging

When people talk about the 'threats' that AI could bring. they seem to underestimate what economists call the opportunity costs. This is essentially the cost of things we didn't do because we chose something else. The cost of not applying AI could start to accumulate.

Not enough attention is being paid to governance, and, if you have some inside understanding, it is not difficult to see where things are going. It seems to me that one of the problems we have is that we don't have enough clarity on ethical guidelines. There is insufficient push about this from healthcare stakeholders. I try to convince people that the main problem is not what kind of innovation we are going to have but what solutions we want to put in place when using any kind of innovation. The governance of the digital is the real difficulty,

not just digital innovation per se. What incentives are we establishing for social understanding, acceptability, corporate responsibility and good governance to develop socially preferable solutions, and hinder the worst shortcomings? This all comes in waves though. In the same way academia anticipated digital ethics issues and today we finally have some real engagement, we are now anticipating issues in academia that will affect the governance of digital in the near future. I expect this to hit the social spectrum engagement a bit later. We could compare it to developing a cure in the lab and getting the pills from your GP. It takes years.

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"MINDFUL" RATHER THAN
"CAREFUL" 99

Al impact on employment

There is a risk of talking too much about risks. In the job context, it is very interesting because the statistics can be confusing. In almost any story about jobs being automated, created, transformed or made obsolete, there appears to be no consistency in a comparative analysis. The bottom line is that nobody quite knows what the impact of AI on the healthcare job market will be. But when some people talk about their being no jobs in the future, my response is that this is just not plausible. There will always be a surplus of demand for care, at all stages and in all contexts. For example, we know, in the UK at least, that healthcare and elderly care are in desperate need of staff.

Imagine we go back to the past and someone has just invented vending machines. They should have killed off every coffee shop in the world. But what has happened? Coffee shops are blooming. Vending machines have not killed the barista job. We have more diversity, more choices. Do not get me wrong. This is not as reassuring as it may sound because, on the other hand, bank ATMs did kill some banking jobs. I'm only stressing the difficulty in making predictions. In this case, common sense is not the best guide, because there are complex feedback loops linking many transformations. On this note, I want to point out that the country where there is the highest number of robots per person is Japan but that

is also where there is very low unemployment. In fact, Japan has a crisis of unfilled jobs to the point that they're considering opening the market up to foreigners.

There is a lot of uncertainty. It means we have to be ready for what could be a curve ball. The point is, it's not all good or bad. Al will eliminate some jobs but create others. It is the painful transition that needs a social safety net. Not all those who will get the new jobs are those who will lose the old ones. We must ensure that our society takes care of the generation that is going to pay the highest price in this radical transformation, even if this means borrowing a bit from the future to smooth the significant impact of Al on the job market.

Back to the future

Imagine looking back at this century from 100 years in the future and they are talking about us now. They tell a story about the 21st century and Al from the 22nd century perspective. Will they be saying 'They had so many opportunities and what a mess they made. What were they thinking?' or 'They had so many opportunities and they managed them guite well, thank you!?'

We can compare this to the environmental crisis. We are not pleased with our parents and grandparents for what they have allowed to happen to our planet; and the next generation will probably not be grateful to us for the poor job we are currently doing.

When it comes to AI, I would like to avoid this. Whatever it takes in my little corner, I want to make sure that the story written by the 22nd century about the 21st will be a good one.

That's why I am so engaged and enthused about working hard to make sure that whatever good could be done will actually be done rather than leaving a legacy of a 'should have, would have, could have' scenarios.

KEY POINTS



- Al is being misused and underused
- Al has decades of history but ethics discussions are only now hitting society
- ✓ Governance of AI needs more attention
- We don't know how AI will impact the employment market; dystopic projections are unfounded
- Healthcare is facing severe understaffing and AI could fill a shortfall
- A mindful rather than a paralysing careful approach to AI is more fitting to ensure innovation and pursuit of opportunities