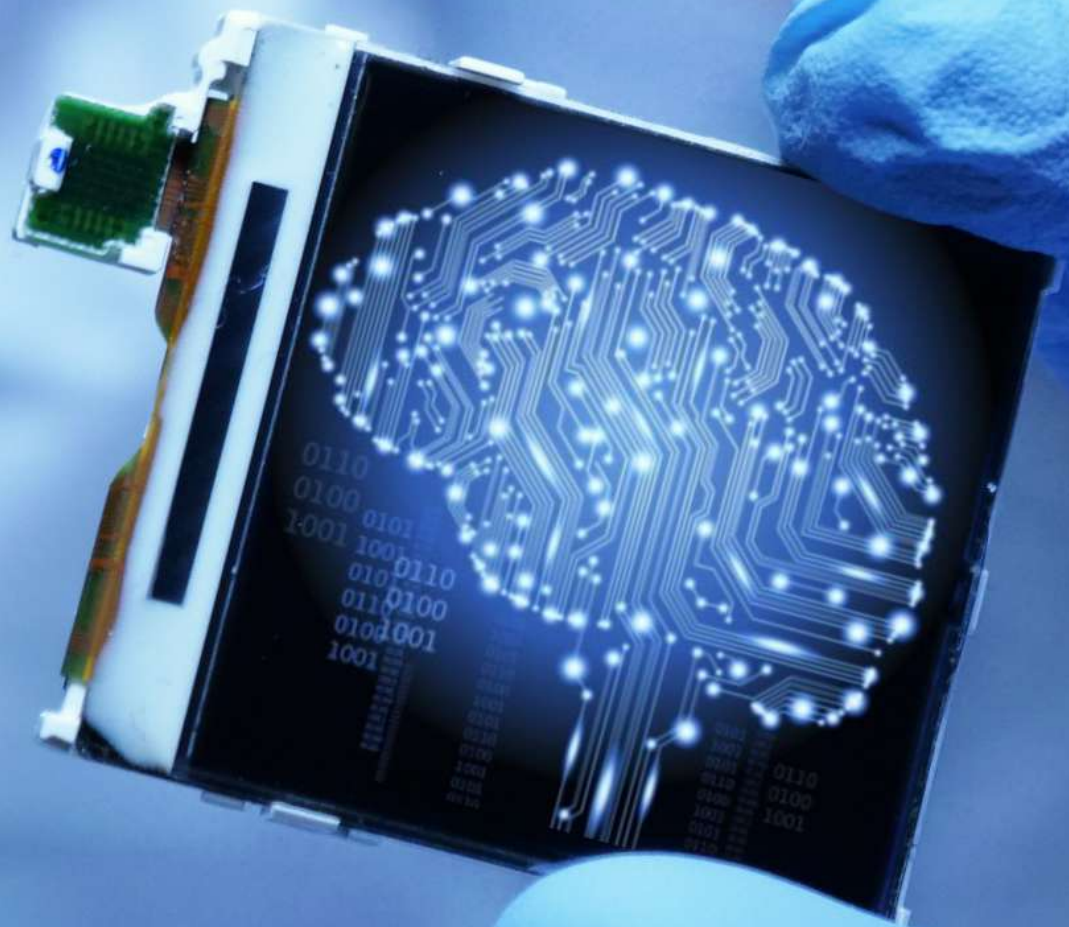


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New Advancements in Anaesthesia

by Dr. Vinanti Cherian

Being able to put someone into a chemically induced sleep and then take them out of it has been one of the pioneering medical advancements of our time. It's a way in which people can combat all manner of life-threatening illnesses and ultimately survive against gruelling odds.

But has it gotten any better? We would like to think that it has. In fact, we're pretty confident that there have been medical advancements in the technology behind anaesthetics in the last couple years, so we set out to find out.

New Technologies

There have been considerable advancements when it comes to technology and how it performs. For example, the winner of 2020 innovation in anaesthesia award is the SageTech Automated Extraction Machine. This is a unique piece of kit which will capture the inhalation-based products and then purify them so that they can be put back under the market and sold under licence. SageTech's ground breaking technology will reduce the cost of anaesthesia and also reduce environmental pollution. Research suggests, that anaesthetic gases represent 5% of the carbon footprint for all acute NHS organisations and this new innovation will facilitate recycling of exhaled anaesthetic gases and contribute towards significant reduction in environmental impact of anaesthesia.

What we've discovered this means, in essence, is that there's going to be a degree of recycling when it comes to sedatives which are inhaled. Think about it. If an anaesthetic is going to be one which can be captured, repurposed for use again and put back onto the market, then there's going to be even less waste involved in the creation of a new product!

Keeping the Costs Down

Fundamentally, what we have found is that anaesthetics are not a cheap affair. The cost of creating a safe product - one that won't kill the patient - is quite high. Research costs and testing costs can all rack up, and it means that there needs to be a more sustainable method of putting people to sleep. We think that this might well be it.

If you can keep the costs down for your product, then you'll be able to get the most from everything that you do. It is a quick and easy way of making it all work, and it means that there is more money to put towards research.

At the end of the day, the ultimate objective of any industry is to be able to create a way of becoming self-reliant and sustainable. For the anaesthetic industry, it's all about being able to find new methods of anaesthetics which will help to safely put patients into a chemically induced state of unconsciousness without causing any long-term harm. The more refined the process can become, the more straightforward it is to create the products, and the greater the savings for the industry as a whole.

Basically, it's all about being able to expand the project and find the different resources that are required to create a brand-new world when it comes to anaesthetics. It's a method that we have used to successfully perform incredible surgeries and save lives, and the industry is always growing. It's important to realise that being able to keep the cost down means that the process can become more refined, and the degree of success will get higher.

Analysis of Medical Data in the Healthcare Industry with the aid of Artificial Intelligence (AI)

by Dr. Terence McIvor

Medical and healthcare data tends to get quite complicated. There are numerous parts of medical data which require a considerable amount of expertise to begin to interpret and calculate results from, and so the number of experts required for a given task is higher than other industries.

However, with the aid of artificial intelligence, we speculated may well be possible for medical and healthcare data to be calculated, interpreted, and conclusions extrapolated from in a much easier fashion.

Growing Sophistication

There is, generally speaking, a growing sophistication when it comes to artificial intelligence. Artificial intelligence used to be something that was only capable of very basic tasks, but it has evolved and developed over time to become something a little more sophisticated.

What we have found now is that there is growing evidence to suggest that artificial intelligence can interpret and understand medical data as it is provided. Charts, diagnoses, medical terminology, artificial intelligence is capable of breaking it all up and delivering it into conclusions which can be easily understood.

What Does This Mean?

People often question what this means. Well, what we have discovered is that it tends to represent a growing shift in the way that medical and health care data is provided. Basically, what this means is that people with a lower knowledge base than the medical experts can still collect and interpret data for them, and that's taking some of the pressure off those experts. It allows for a more generalised distribution of tasks and assignments, and provides a special intelligence with a key role to play.

The more the medical knowledge is widely shared, the more that people can grow and develop, and the more people who can help.

Exciting Futures

One of the primary goals of technology is to do something that can't necessarily be done right now. So if artificial intelligence can interpret, evaluate, and conclude based on medical data provided to it, then it is possible that medical experts may find their job descriptions reassessed in the future.

This data eliminates the need for specialist qualifications to an extent, and in some cases, means that even the most basic of healthcare providers can effectively evaluate a medical diagnosis. It gives them the knowledge they need to provide specialist care, and at the same time, does take that pressure off the experts.

To conclude, what we have discovered is that artificial intelligence is rapidly approaching a point where it can deconstruct and evaluate medical data on a regular basis, which opens up a whole selection of possibilities for what the technology can do in the future. When your technology is suitably advanced, it's possible to do incredible things with it. We are fascinated by the possibility that a computer can take a medical diagnosis, deconstruct it, present it in an understandable format, and then dispense that to patients or people in training. It represents a whole shift in attitudes towards medical texts, and it will be interesting to see the long-term ramifications of this.

Interactive Learning Management Systems (LMS)

by Zita Bertha

The learning management system is a concept which has been around for a while now. It refers to the process of using data and analytics to identify gaps in training and skill sets, and then to provide any appropriate course or session to introduce that new skill.

With the introduction of virtual and augmented reality, the learning management system became a little more complex. We have discovered that an interactive learning management system is a far superior method of delivering concise and relevant training to employees, students and any interested parties.

Interactive Mediums

Almost immediately, it is possible to identify a benefit of the learning management system, as the majority of the programs which provide a service like this are web-based anyway.

What this means is that it is very easy to introduce an interactive medium into the equation. Generally speaking, we discovered that people respond better to interactive mediums when dealing with training and the enhancing of the skill set.

It's probably something to do with the way that the interactive medium functions, especially when we consider virtual reality. Being able to have a precise input in the types of courses that you do, to have interactive materials for your courses can be very helpful for the training perspective.

Virtual reality provides an excellent way to engage and deliver training while at the same time allowing the criteria to be met for the necessary knowledge required to complete the course.

Learning, Streamlined

If there is one thing to be taken from interactive media, it is that it delivers a lot of information in a very concise manner. This has streamlined the training process, and learning management systems have evolved to respond to this.

It's generally been the case that the streamlined nature of interactive learning management systems has now influenced the way in which people expect to be trained.

People now expect information delivered quickly and efficiently. The understanding is that there is a concise delivery system in place in the form of virtual reality, which allows you to have a purely information-based delivery system, while at the same time having an interactive media. It's this combination which has accelerated the learning process, and made it much more efficient. Standard has been raised, and most learning management systems have adapted to cope with this.

In summary, we have discovered that there is a growing need for interactive learning management systems. The software that generates and creates training programs for individuals based on data and analytics needs to have an interactive element in terms of the delivery system for said training. Learners now expect a streamlined system, and we feel that this is indicative of a growing change in regards to the attitude towards learning. People are starting to view learning has been a quick process, something that can be enhanced via virtual reality and artificial reality, and it is vital that training providers start without their practices to cope with this changing mindset.

Nanotechnology in the Pharmaceutical Industry

by Dr. Terence McIvor

The pharmaceutical industry is one which has really developed in the last 20 years or so. It has provided some of the most impactful leaps in technology, helping to provide people with medicines that would otherwise leave them with a very painful death ahead.

Nanotechnology is something which has been introduced to the pharmaceutical industry only recently, and it's interesting to see exactly how this technology has been used and created.

Nanotechnology in Medicine

We have been looking into exactly how nanotechnology is introduced into medicine to help people. One of the most prominent examples that kept cropping up was that people use nanotechnology to introduce medicine to pain receptors in the cells at the microscopic level. Instead of a balm, this is much more of a precise application of medicine. It's much more akin to a surgery, something designed to be meticulous and effective.

Precise Applications

Nanotechnology within the pharmaceutical industry is generally going to be quite precise. That's the point of it. It's supposed to be precise, accurate, like a complete restructuring.

There are some conditions which only exist on the microscopic level. It's possible to identify signs of damage before they become serious with the help of nanotechnology. Think about the current cure for cancer. Chemotherapy is the absolute destruction of the immune system. We all know it, it will nearly kill anybody who takes it, to try and kill all the cells, good and bad.

Theoretically, if an early warning system is found, nanotechnology could be used to target cancerous cells and destroy them before they became a problem. It's just a theory, but it's one which we feel may have some validity.

Searching For Answers

This is a particular field of study which interests us quite a lot, and we are quite keen to engage with this research to further explore this field. Can nanotechnology be used to influence pharmaceutical medicine even more?

One has to consider the potential ramifications of nanotechnology. If we can target and cure any disease before it becomes a major problem, mortality rates will drop dramatically across the board. There are so many deaths from medical related problems every year, being able to prevent some of them with the help of nanotechnology in pharmaceutical medicine could well be the key to a prosperous society.

In conclusion, there is no real evidence at the moment that you can make a change. No technology in pharmaceutical medicine is still in its relative infancy, so we are interested to see exactly how far we can progress. Being able to conduct research into the potential impacts of nanotechnology, its applications within pharmaceutical medicine would be fascinating, without doubt. It would be remarkable to see exactly how medicine could advance to help to cure people. Using this technology would no doubt have serious benefits, if it could be combined with pharmaceutical medicine in a viable way. It's all a question of what we can do and when.