UPDATES MEDICAL INDUSTRY

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With the fast moving world of ours, the necessity for developments in the medical industry has been of major importance. With the technical advancements each day it has become easier for the man to develop easier and quicker means of availing convincing results.

Introduction

Medicine industry is going through a big transformation with innovations and technology joining hands with doctors and medical practitioners. Many IT industries are focused on improving healthcare system by improving patient care and safety to meet the demand of high quality and efficient healthcare organizations. This extra assistance to medical industry is making it take significant strides in patient health and has enabled it to follow a more prognostic approach than a diagnostic one.

3-D Visualization and Augmented Reality for Surgery

Surgeons have mostly trusted on microscopes or other visual systems throughout operations. Many of the times they don't even have any support of any visual system and have to rely on the naked eye. It becomes a tedious task for the surgeon to coordinate both vision and communication with his staff as he is completely focused on operating area. Since a few years now, surgeons have been experimenting with new high-resolution 3D visualization technology for complex surgical practices like neurology and ophthalmology. These visual systems not only provide a clear image but also use the data to create visual templates for a surgeon to execute the surgery. This increases a surgeon's comfort in the operating theatre and improves his understanding of the surgery with a detailed 3D high-resolution view.

Neurovascular Stent Retriever

Heart or brain stroke is a leading cause of deaths around the world. Ischemic stroke is predominant in deaths due to strokes. A stent retriever is a device that removes clots and helps in speedy recovery of patients suffering from ischemic strokes. These
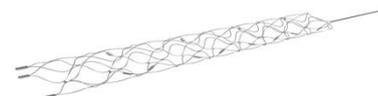
Solitaire Revascularization Device

devices restore the blood flow by removing clots from intracranial arteries. Flow restoration increases the supply of oxygen in ischemic brain region and acts as a support system for thrombolytic drugs. Moreover, these stent retrievers enable thrombectomy by engaging the thrombotic material in the guide catheter. These stents are repeatedly applicable and can be used even in small vessels in the brain. No anticoagulation treatment is necessary as these stents are not

deployed permanently. Many observational studies are in progress to understand the safety and efficacy of these stent retrievers.

Interoperability between Health Systems

In this internet age, information can be easily accessed across the globe. Interoperability is benefiting from this. Patient information can be shared across care centers seamlessly. Health information is an important part of the healthcare system. With this information in hand, practitioners and doctors will be able to provide value-based care to patients with a detailed treatment plan. Many companies like referralMD, have started coming up with such solutions and changing the way the healthcare companies communicate. Not only these statistics and data helps patients in their health treatment but also helps hospitals to optimize their work practices. this enables hospitals to the patient specific care plan and saves their staff's time. This electronic way of data exchange is accurate and saves time.

Robotic Nurse Assistant

Nurses in hospitals constantly get injured while moving or lifting patients from bed or from an emergency fall. These instances are common in hospitals. Companies like RIKEN and Tokai Rubber Industries etc. have developed robots to help assist nurses in hospitals. These robotic nursing assistants help reduce workplace injuries and patient falls. This, in turn, improves the staff's work satisfaction and retention. These robots work alongside nurses and can work in confined places as well. They have an inbuilt intelligent and learning system that automatically adjusts as per a patient's lifting requirements. Hospitals would no longer need a dedicated patient lifting team, these robots will come automatically whenever called for.

Fecal Therapy

Fecal transplantation is a procedure where fecal matter is taken from a donor, is mixed with a saline solution and placed back in a patient by endoscopy or colonoscopy. This process helps to cure the infection - *clostridium difficile* in patients and has a higher cure rate than antibiotics. Researchers are working towards improving this curing process. Steps are even being taken to create frozen feces banks. It is a low-cost, highly effective cure with low-risk probabilities. This therapy shows great promise and is expected to cure other gastrointestinal disorders in the future.

CONCLUSION

The medical field is on a path of innovation and these technological milestones are just a glimpse of what the future has in store. With such a fast paced growth healthcare system is destined to improve and people will be enjoying healthier lives.

REFERENCES

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