How Robotic Technology is Changing Healthcare

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Abstract

Because of this diversity of robotics applications, professionals in the field work in a wide variety of industries, from defence, and aerospace to manufacturing and design. Within these industries, there are two main roles for personnel with training in robotics technologies. Robotics engineers are responsible for developing new robotics systems and upgrading the old ones to meet contemporary demands. Robots in medicine help by relieving medical personnel from routine tasks, that take their time away from more pressing responsibilities, and by making medical procedures safer and less costly for patients. They can also perform accurate surgery in tiny places and transport dangerous substances.

Robotic technologies appear in many areas that directly affect patient care. They can be used to disinfect patient rooms and operating suites, reducing risks for patients and medical personnel. They work in laboratories to take samples and the to transport, analyse, and store them.

This is especially good news is you have ever had blood drawn by someone who had to try several times to find a "good vein." The robotic lab assistant can locate that vessel and draw the blood with less pain and anxiety for the patient. Robots also prepare and dispense medications in pharmacological labs. In larger facilities robotic carts carry bed linens and even meals from floor to floor, riding elevators and manoeuvring through automatic doors. There are also "gears and wires" robotic assistants that help paraplegics move and can administer physical therapy.

The ultimate question for robotics in healthcare is whether they will take jobs away from humans. There are several reasons why the machines will not replace their human counterparts. For one thing, most hospitals have less than 300 beds. They simply cannot afford the technology. The automated guided vehicles require a dedicated hall or floor tracks and the installation of navigation devices throughout the facilities. Other carts work with the help of a laser-drawn map of the hospital programmed into them that includes elevators, turns and automated doors. That process is also extremely expensive. But ultimately, robotic assistants cannot replace basic human contact.

The proliferation of consumer wearables and other medical devices combined with AI is also being applied to oversee early-stage heart disease, enabling doctors and other caregivers to better monitor and detect potentially life-threatening episodes at earlier, more treatable stages. Additionally, AI increases the ability for healthcare professionals to better understand the day-to-day patterns and needs of the people they care for, and with that understanding they can provide better feedback, guidance, and support for staying healthy.

AI is already being used to detect diseases, such as cancer, more accurately and in their early stages. According to the American Cancer Society, a high proportion of mammograms yield false results, leading to 1 in 2 healthy women being told they have cancer. The use of AI is enabling review and translation of mammograms 30 times faster with 99% accuracy, reducing the need for unnecessary biopsies.

References:

Healthcare Administration Degree and Career How are Robots Changing Healthcare?https://www.healthcare-administration-degree.net/faq/how-are-robots-changing-healthcare/

PwC network: No longer science fiction, AI and robotics are transforming healthcare
https://www.pwc.com/gx/en/industries/healthcare/publications/ai-robotics-new-health/transforming-healthcare.html

Robotics Technologies
https://study.com/directory/category/Engineering/Electrical_Engineering_and_Electronics/Robotics_Technologies.html



Biography:

Hon. H.E. Sir. Dr. Raphael Louis, *(Global Healthcare Reform Expert)*, is the Founder, Chairman, President & Chief Executive Officer (CEO) of The Federal Association for the Advancement of Visible Minorities (FAAVM), whereas a NFP Corporation including activities such as the FAAVM Socio Economic Development Council (SEDC), which plays a vital portion in the overall mission realization of the organization. He is also Founder/Leader of the National Coalition Party of Canada (NCPC) and believes that most Canadians who are in the slightest degree politically active are inclined to hold one of the two chief political positions common in this country, what we call conservatism or liberalism, thus politically, Canadians are highly divided. Raphael political vision when it comes to issues of finance, immigration, public health, national security, diplomacy, human rights, international trade, foreign direct investment (FDI) and environmental protection, is that government must represent Canadian interests first.

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