"Mind-boggling" New Technologies In Healthcare Industry

Innovations are driving new and exciting changes in healthcare never before thought possible. Innovations from nanobots in blood to head transplants and mind transfer to Star Trek-like "tricoders."

Hospitals are at the forefront of using the latest technologies to improve the quality of care for their patients.

"We're one of the very few U.S. hospitals using the BrainLab Airo Mobile CT which enables physicians to do CT scans during surgery," Mike Johnson said, president and CEO of Regional Medical Center of San Jose.

"This provides more comprehensive information for more precise surgeries. Regional is also a Joint Commission-Certified Comprehensive Stroke Center where the stroke treatment window is extended because of Neuro-Interventional Radiology procedures. The result is better outcomes and better quality of life for our stroke patients."

Regional is a technologically advanced Level II Trauma Center, Heart Attack Receiving Center and Community Cancer Center.

Mobile technology is also changing the healthcare industry.

"Recent advances in technology (sensors, algorithms, machine learning) have allowed us to build consumer devices that simply weren't possible a decade ago," Dr. Walter de Brouwer said, CEO and founder of Scanadu. "All that is possible thanks to the smart phone."

"With Scanadu, for example, once consumers have their personal data and understand it with the help of doctors, they can make changes in their lives to improve health–potentially catch illness or chronic disease early, reduce healthcare costs and even begin to predict health issues."

Dr. Brouwer predicts a world where everything in our bathroom is gathering data.

- Toothbrushes will measure fluoride, remember cavities and notify you of bad breath.
- Glasses will monitor your eyesight and advise correction.
- Combs will screen follicles, report of dandruff density and scan for fungus or lice. Tissues will examine snot and mucus when you blow your nose. This data will be processed, displayed and actionable in real time to your database and to your doctor, all through mobile technology.

Wearables are big business. Over 70 million tracking devices have been sold to date including:

Apple Watch—feature-packed, with solid fitness software with hundreds of health and fitness tracking apps.

Fitbit—fitness products that help you stay motivated and improve your health by tracking your activities.



Gadgets that help seniors live independently and safely in their own homes have been around for awhile but are now catching on fast thanks to new technology—video monitors, sensors, medical alerts, etc.

Some leading healthcare technologies coming your way sooner than you think include:

- **Tricoders**—already here. Scanadu's Scout tracks your blood pressure, heart rate and temperature.
- Nanobots in blood—to destroy bacteria and other pathogens.
- **BioSensors**—incorporated within your clothing to provide doctors valuable feedback for a range of health issues.
- **Robotic Surgery**—gives surgeons the tools they need to practice and get it right before performing surgeries.
- **Blood-Testing**—ability to run tests with micro samples of blood quick and cheap.
- Mind Transfer—controlling prosthetic arms with your mind.

Technology is transforming the entire healthcare industry. These innovations are helping us enjoy a longer, healthier and better quality of life.