

## **Artificial Intelligence and Robotics: Defining Nursing's Role**

Artificial intelligence (AI) and robotics is already in use in healthcare and in nursing. According to Merriam-Webster Online, robotics is the branch of technology that deals with the design, construction, operation, and application of robots. A robot is defined as a machine that looks like a human being and performs various complex acts (such as walking or talking) of a human being. Artificial intelligence is defined as a branch of computer science dealing with the simulation of intelligent behavior in computers.

Nursing, as well as healthcare institutions must navigate the paradigmatic change created by the result of the rapid ascent of technology and digitalization in all aspects of our lives. Robots and AI are currently being utilized as companions for patients, data gatherers of medical information, conduits of patient education, aids for mobility and lifting, diagnosis of medical conditions and performance of surgical procedures, among other functions.

The ethical issues as well as care-centric issues related to AI and robotics must be examined. The impact on the future of nursing as a profession, including the impact on the workforce in relation to supply and demand and humanistic nursing care delivery must be a priority for the profession.

Popular culture often portrays robots as either subservient or evil both of which could create an inaccurate portrayal of the presence of this technology. However, it was recently it was reported that Google's AI was actually able to write code to create its own AI which raises a legitimate cause for concern. In another experiment by Facebook, two AI's were able to create their own language while communicating with each other. While neither of these occurrences was as sinister as it sounds, this still creates an awareness that caregivers need to become more knowledgeable about this domain of technology which is a growing element in the healthcare landscape. With concern for patient safety, humanistic caring and the future of the profession, it is important to examine the ramifications of both the benefits and possible risks of both AI and robotics on nursing and healthcare.

It is wise to be open to new technologies and the benefits they can bring, it is critical that nurses are prudent and educated, and involved regarding the development of technologies that will affect the work that they do.

Recommendations:

FNA will form a Technology Task Force with the goal of:

- Defining the possible impact of AI and Robotics on the nursing profession
- Developing the FNA's role in influencing the future of AI and robotics in nursing in Florida
- Determining how AI and or Robotics is in use in Florida and in other parts of the United States and internationally as it relates to healthcare and nursing

- Identify roles and opportunities for nurses in the development of AI and robotics in healthcare
- Provide a clearing house for the education of nurses about AI and robotics
- Provide continuing education programs on AI and robotics
- Utilize *The Florida Nurse* as a means to inform nurses about this evolving technology

### References

Ashford, H., Hunter, A., Phung, C. & Coustasse, A. ( 2015). Use of robotics on cardiac surgery.

Paper presented at the AABRI International Conference, Orlando FL

Erickson,H., Salzman-Erickson, M. (2016). Future challenges and artificial intelligence in nursing , *Permanente Journal*, 2 (3) 15-243.

<http://www.iflscience.com/technology/google-ai-creating-own-ai/>

IFL Science , Google's ai is now creating its own ai, Retrieved on 8/30/2017 at

<http://www.iflscience.com/technology/google-ai-creating-own-ai/>