


# Use of Artificial Intelligence for Improving Patient Flow and Healthcare Delivery

**Samer Ellahham**

Cleveland Clinic Abu Dhabi

 [samerellahham@yahoo.com](mailto:samerellahham@yahoo.com)

## Abstract

Artificial Intelligence (AI) is as a promising tool for supporting the healthcare administration and it is fundamentally changing medicine. AI mainly refers to doctors and hospitals analyzing vast data sets of potentially life-saving information through AI algorithms. These algorithms have several applications in hospitals, clinical laboratories, and research facilities. In this review, we will provide an overview of applications of AI in improving patient flow to the hospital and patient transfer within a hospital. As early as in 1956, John McCarthy and his colleagues, Marvin Minsky, Claude Shannon and Nathaniel Rochester coined the term 'Artificial Intelligence' (AI). More commonly, AI is defined as, "the science and engineering of making intelligent machines. Artificial intelligence refers to the computer programs that execute a task like that of human intelligence, especially intelligently and independently. His main objective of AI is to develop a machine that can exhibit human intelligence. Artificial intelligence is as a promising tool for supporting the healthcare administration. Several studies have shown that AI algorithms are capable of managing patient flow and thus augmenting clinical care by reducing the administrative demands on clinicians. Artificial intelligence is not about robots completing the jobs and rendering people obsolete. Artificial intelligence in healthcare is set to help healthcare works and stakeholders to manage the vast data and transform them into potentially life-saving information. Despite the advantages, AI applications continue to face serious challenges in healthcare (Table 1). In this review, we will focus on the role of AI in patient flow management as well as in predicting the patient admission to hospital.

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## Biography

Dr. Samer Ellahham, MD, is a Staff Physician in the Heart, Vascular & Thoracic Institute at Cleveland Clinic Abu Dhabi. Prior to joining Cleveland Clinic Abu Dhabi, Dr. Ellahham was the Chief Quality Officer and Cardiology Consultant at Sheikh Khalifa Medical City. Dr. Ellahham was awarded Physician of the Year in 2007. He also published numerous

articles in the Cardiovascular Health Journal and Quality. He received his medical degree from the Faculty of Medicine at the American University of Beirut. He completed his residency at Georgetown University Hospital Washington Hospital Center. He then completed a fellowship at Virginia Commonwealth University Health System.