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into daily healthcare practices. Let's take one example: the Dubai Future Foundation has invested millions into AI development initiatives, such as the UAE AI and Robotics Award for Good, which asks applicants from across the globe to develop and submit advanced uses for AI in healthcare. Furthermore, tech startups have soared in number in the Middle East and North Africa (MENA) region since 2010, and the UAE is leading the way—securing 50% of all MENA tech funding between 2014 and 2017.

This makes one thing clear: the future of AI in the UAE's healthcare

system is bright. So, here's a look at what the future may hold when it comes to the use of AI in the nation's health industry.

### 1. Understanding Data

The move from paper to digitalized medical records over the last two decades has undoubtedly improved the efficiency of hospitals and clinics across the UAE. But in doing so, it has generated enormous amounts of data—data that continues to grow at a rapid rate each year. In fact, reports estimate that the amount of data created and copied globally doubles in size every two years

and will reach 44 trillion gigabytes by 2020.

However, this data has limited benefit in healthcare unless it is thoroughly analyzed, and the findings are used to improve patient diagnosis, treatment and care pathways. This is where AI comes into play. AI can be used to extract information from doctor's notes and medical journals, while machine learning procedures can be used to identify trends in the data that reveal risk factors for certain diseases, treatment responses, disease outcomes and many other variables.

A case in point is the AI-focused project Google Deepmind Health, which is currently running in the UK. In this project, data is being mined from the medical records of patients. The aim is to ensure patients are diagnosed and treated quicker and accurately than ever before.

### 2. Diagnosing Disease

AI-based disease diagnosis is already in progress. In 2017, US researchers published findings that showed that machine learning platforms can be taught to diagnose skin cancer after processing hundreds of thousands of images of different types of skin cancer. When pitted against human dermatologists, the machines demonstrated a comparable level of accuracy.

Overall there is more than 60 startups exploring AI projects only in healthcare. In the future, patient tissue samples can then be cross-matched against databases to identify cancer at a very early stage, which will translate the AI application into a cancer screening tool. And in a worldwide first, in 2017, the US Food and Drug Administration (FDA) approved an AI-based medical imaging platform called Arterys for clinical use. The platform uses AI to