# AI transforms healthcare in Central Florida



Artificial Intelligence (AI) is increasingly becoming a cornerstone in the healthcare sector across Central Florida, with notable implementations by two of the region’s major health systems, Orlando Health and AdventHealth Central Florida. These organisations are harnessing AI technology to enhance patient care, streamline administrative processes, and identify early indicators of critical health conditions such as pancreatic cancer and sepsis.

AdventHealth integrated AI into its imaging department in 2020, focusing on the early detection of strokes and osteoporosis via X-ray imaging. Similarly, Orlando Health employs AI to identify patients eligible for its hospital-at-home programme and to remotely monitor patient vitals, alerting nursing staff when critical interventions may be required.

AI's role in addressing administrative challenges is particularly significant. Routine tasks such as recording and transcribing appointments and generating clinical notes and summaries are increasingly being managed by AI systems. This shift not only alleviates ongoing staffing shortages in Florida's healthcare facilities but also allows healthcare providers to dedicate more time to patient care, thus enhancing overall operational efficiency.

As of December 2023, the U.S. Food and Drug Administration (FDA) has granted approval to 692 AI and machine-learning-enabled medical devices, underscoring the rapid integration of this technology into medical practice nationwide. AdventHealth Central Florida is actively utilising AI across over 40 applications, with an AI Advisory Board convening monthly to assess emerging technologies.

The benefits of AI in healthcare are manifold. Its capacity to handle large datasets quickly and accurately is transforming how patient safety is managed. For instance, AI has been pivotal in reducing mortality rates; a 2023 study revealed that AI-driven sepsis detection technology led to a remarkable 44% decline in sepsis fatalities. Additionally, by automating administrative tasks, AI is helping to minimise human error, resulting in increased efficiency for both patients and healthcare providers.

Despite the promising advancements, the integration of AI in healthcare is not without its challenges. Concerns about accuracy have been highlighted in recent studies, such as one from the University of Michigan which found that sepsis-detection AI correctly predicted the condition in only 50% of patients who developed it. Moreover, researchers from Stanford observed that ChatGPT-4 provided accurate clinical advice merely 41% of the time, with 6% of its outputs containing fabricated citations, a phenomenon referred to as “hallucination.”

Bias in AI systems is another critical issue; the U.S. Department of Health and Human Services has cautioned that AI reflects human biases that could interfere with accurate diagnoses and treatment plans. Public sentiment also presents a hurdle, with a 2023 Pew Research poll revealing that 60% of Americans expressed discomfort regarding AI applications in healthcare settings.

Looking to the future, experts envision a broader application of AI in diagnosing illnesses and making treatment decisions, conditional upon effective regulation and ongoing improvements. Should these advancements materialise, AI possesses the potential to significantly enhance diagnostic precision, tailor treatment plans based on individual patient data, and alleviate the pressure on healthcare professionals.

The evolving landscape of AI in Central Florida's healthcare systems exemplifies its vast potential to improve patient outcomes and operational efficiency. However, it brings to light the essential need for addressing issues surrounding accuracy, bias, and public confidence in AI technologies. As organisations like AdventHealth and Orlando Health continue to explore AI's capabilities, it will be critical for them to maintain transparency and prioritise patient safety, ensuring that technology serves as a complement to, and not a replacement for, the human element in medical care.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.centralfloridalifestyle.com/tech/the-role-of-ai-in-central-floridas-health-systems-benefits-challenges-and-future-prospects/> - Corroborates the use of AI by Orlando Health and AdventHealth Central Florida to enhance patient care, streamline administrative processes, and identify early indicators of critical health conditions.
2. <https://www.centralfloridalifestyle.com/tech/the-role-of-ai-in-central-floridas-health-systems-benefits-challenges-and-future-prospects/> - Details AdventHealth's integration of AI into its imaging department for early detection of strokes and osteoporosis, and Orlando Health's use of AI for its hospital-at-home program and remote patient monitoring.
3. <https://www.adventhealth.com/business/adventhealth-central-florida-media-resources/news/how-ai-and-human-expertise-are-working-together-adventhealth-improve-patient-care> - Supports the integration of AI in AdventHealth's imaging departments to help high-stroke-risk patients receive faster diagnoses and better image quality.
4. <https://www.centralfloridalifestyle.com/tech/the-role-of-ai-in-central-floridas-health-systems-benefits-challenges-and-future-prospects/> - Explains how AI is used to manage administrative tasks such as recording and transcribing appointments and generating clinical notes and summaries.
5. <https://news.orlando.org/blog/adventhealth-healthcare-transformation/> - Discusses AdventHealth's investment in AI and machine learning to treat patients more targetedly and holistically, and to address administrative challenges.
6. <https://www.adventhealth.com/business/adventhealth-central-florida-media-resources/news/how-ai-and-human-expertise-are-working-together-adventhealth-improve-patient-care> - Highlights the benefits of AI in improving patient care, such as faster and more accurate diagnoses, and better care summaries in health records.
7. <https://www.centralfloridalifestyle.com/tech/the-role-of-ai-in-central-floridas-health-systems-benefits-challenges-and-future-prospects/> - Mentions the FDA's approval of AI and machine-learning-enabled medical devices and AdventHealth's extensive use of AI across various applications.
8. <https://www.adventhealth.com/business/adventhealth-central-florida-media-resources/news/ai-technology-shortens-mri-times-boosts-patient-comfort-adventhealth-waterman> - Details how AI technology, such as Deep Resolve Boost, is used to improve MRI scan times and image quality, enhancing patient comfort and diagnostic precision.
9. <https://www.centralfloridalifestyle.com/tech/the-role-of-ai-in-central-floridas-health-systems-benefits-challenges-and-future-prospects/> - Addresses the challenges of AI in healthcare, including concerns about accuracy, bias, and public confidence in AI technologies.
10. <https://www.adventhealth.com/business/adventhealth-central-florida-media-resources/news/how-ai-and-human-expertise-are-working-together-adventhealth-improve-patient-care> - Emphasizes that AI is intended to complement, not replace, human expertise in healthcare, ensuring that technology enhances patient care without diminishing the human element.
11. <https://news.orlando.org/blog/adventhealth-healthcare-transformation/> - Outlines the future potential of AI in healthcare, including broader applications in diagnosing illnesses and making treatment decisions, conditional upon effective regulation and ongoing improvements.
12. <https://www.centralfloridalifestyle.com/tech/the-role-of-ai-in-central-floridas-health-systems-benefits-challenges-and-future-prospects/?utm_source=rss&utm_medium=rss&utm_campaign=the-role-of-ai-in-central-floridas-health-systems-benefits-challenges-and-future-prospects> - Please view link - unable to able to access data