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ENHANCING PATIENT ENGAGEMENT AND SATISFACTION IN HEALTHCARE THROUGH AI-POWERED CONVERSATIONAL AGENTS

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ABSTRACT

The rapid evolution of artificial intelligence has ushered in a transformative era for healthcare delivery, particularly in patient engagement and satisfaction. AI-powered conversational agents are emerging as pivotal tools that bridge the communication gap between patients and healthcare providers. By facilitating real-time interactions and personalized responses, these agents enhance patient experiences, reduce administrative burdens, and foster more informed decision-making. This technology leverages natural language processing and machine learning to interpret patient queries, provide accurate health information, and offer support throughout the care continuum. Furthermore, the integration of these agents into healthcare systems can streamline appointment scheduling, medication reminders, and follow-up care, thereby contributing to improved clinical outcomes and operational efficiency. The abstract underscores the potential of conversational agents to democratize access to healthcare information, empower patients with personalized care pathways, and alleviate the workload of healthcare professionals. It also highlights the need for robust data security measures and ethical guidelines to ensure patient confidentiality and trust. As digital health continues to expand, the adoption of AI-driven tools represents a critical step toward a more patient-centric model of care. This innovation not only redefines traditional communication models but also offers scalable solutions to meet the rising demand for healthcare services, ultimately leading to enhanced patient satisfaction and overall quality of care.

KEYWORDS: *AI-Powered Conversational Agents, Patient Engagement, Healthcare Satisfaction, Digital Transformation, Personalized Care, Telemedicine, Patient-Centric, Innovation.*