Artificial Intelligence (AI) transforms skilled nursing homes by enhancing clinical care and operational efficiency.

Integrating AI in skilled nursing homes holds great promise for transforming care delivery. By enhancing patient care, improving operational efficiency, supporting mental and emotional wellbeing, and ensuring safety and security, AI can significantly improve the quality of life for residents. As technology evolves, nursing homes must embrace these innovations while addressing the associated challenges to realize AI's benefits fully.

Here are some specific examples of AI technologies currently in use:

Remote Patient Monitoring and Telehealth:

Al-driven remote monitoring systems continuously analyze data from electronic health records (EHR) and biometric sensors to predict and prevent adverse events. For instance, Al can detect early signs of pressure ulcers by analyzing images of patients' skin, which allows for timely intervention and reduces the risk of severe complications (Skilled Nursing News). Additionally, Al helps manage chronic conditions like congestive heart failure (CHF) by monitoring weight and blood pressure changes, prompting necessary medication adjustments and patient education (Skilled Nursing News).

Fall Detection and Prevention:

Al and machine learning models predict and prevent falls by monitoring residents' acuity and behavior changes. These systems analyze over 150 data points from EHRs to assess fall risk in near real-time, enabling staff to take proactive measures. Implementing these technologies has shown an 8% reduction in falls in some long-term care communities (<u>McKnight's Long-Term</u> <u>Care News</u>).

Voice Assistants and Robotics:

Voice assistants like Amazon Alexa and Google Assistant assist with medication reminders and data collection. These tools can help patients with disabilities interact more efficiently and ensure adherence to care plans. Telepresence robots allow nurses to interact with patients remotely, reducing the need for physical presence and minimizing exposure risks (<u>American Nurse</u>).

Clinical Decision Support Systems:

Al-powered clinical decision support tools analyze patient data to identify risks and recommend personalized interventions. These systems help in the early detection of potential health issues and support decision-making processes, improving patient outcomes. For example, AI can help manage medication by flagging potential drug interactions, reducing the likelihood of adverse drug reactions (<u>American Nurse</u>) (<u>Skilled Nursing News</u>).

Operational Efficiency:

In addition to clinical applications, AI is improving back-office functions such as HR, finance, and legal operations through Robotic Process Automation (RPA). This automation reduces administrative burdens, allowing staff to focus more on direct patient care. AI also aids in scheduling and optimizing workflows, further enhancing the efficiency of nursing homes (Skilled Nursing News).

By integrating these advanced technologies, skilled nursing homes can provide higher-quality care, improve patient outcomes, and operate more efficiently. The ongoing adoption and development of AI in this sector promises even more significant advancements in the future.