Tablet-based Application For Clinicians

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Our team embarked on an ambitious journey to design and implement a prototype for a tablet-based application aimed at enhancing clinical efficiency and patient care. Developed for Virginia Commonwealth University's School of Nursing and their Mobile Health & Welfare Program (MHWP), our application enables clinicians to seamlessly review patients' past survey responses and key health metrics before their appointments. By leveraging React Native for the frontend and a Rust-based backend, we crafted a system that delivers both speed and reliability in handling sensitive health data.

The application allows clinicians to search through patient records and access crucial health indicators such as glucose levels, weight, blood pressure trends, medication history, and personal health goals. Our goal was to provide a fluid, intuitive interface that presents this information in a digestible manner, ensuring clinicians are well-prepared for their patient interactions. However, designing an interface that accounted for numerous user states and navigation paths proved to be one of our biggest challenges. The complexity of rendering dynamic data visualizations—such as graphs—within React Native added an additional layer of difficulty, as we navigated the framework's inherent limitations.

Despite these challenges, our team remained committed to delivering a polished, functional prototype that meaningfully contributes to clinician workflow and patient care. This project stands as a testament to the power of collaboration, innovation, and the pursuit of impactful healthcare technology.