
Importance of Shake Detection & Compliances in inhaler Which May Increase the Medicines Effect

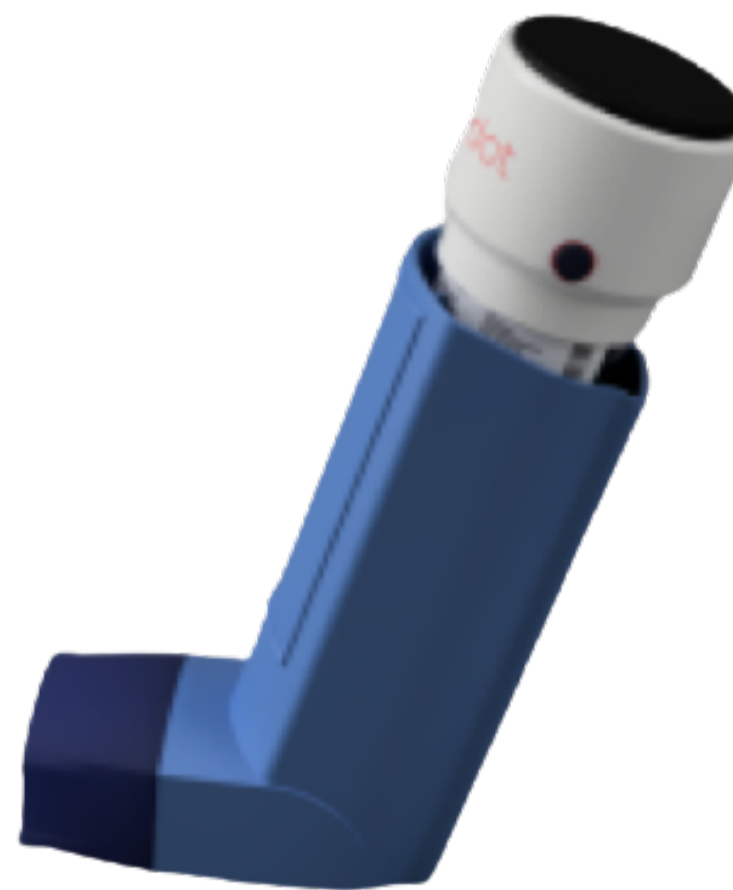
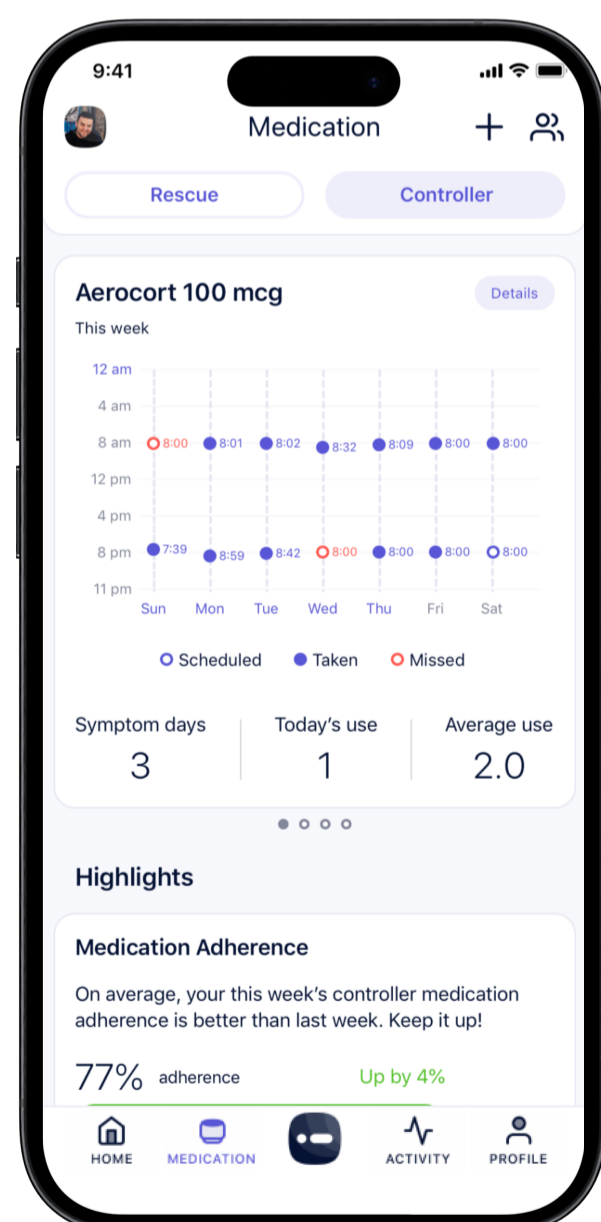
Every day, millions of individuals suffering from chronic pulmonary conditions such as asthma and COPD rely on inhalers. However, research indicates that nearly 90% of these patients face challenges in using their inhalers correctly and lack awareness of their effectiveness. The reason for this discrepancy lies in the fact that inhalers serve as mere medication dispensers; the amount of medication reaching the lungs hinges greatly on the user's technique. For instance, a minor mistake such as activating the inhaler prematurely by just half a second could lead to the loss of nearly 23% of the medication.



Alveofit aids patients in correctly using inhalers by providing real-time audio-visual feedback during usage. Additionally, it incorporates an integrated spirometer to monitor medication intake and lung function, offering a comprehensive assessment of lung health.

Subsequently, we developed an advanced experimental test setup in the laboratory to replicate patients' inhaler usage. Utilizing data collected from patients, we determined the extent of medication loss to the mouth and throat due to usage errors. Our findings revealed that under optimal conditions, patients receive approximately 43% of the medication in their lungs, whereas in the worst-case scenario, deposition is as low as 5-7%. This underscores the significance of adhering to correct inhaler usage steps, as a substantial portion of the medication fails to reach the lungs.

It's not surprising that inadequate inhaler technique is associated with poor health outcomes and increased hospitalizations. Ultimately, medication efficacy is compromised when it doesn't reach the intended target in the lungs.



At Alveofit, our mission is to ensure that every patient maximizes their medication intake each time they use their daily inhaler. We are proud to introduce Alveofit, the world's first digital inhaler tracking device equipped with 6-Axis IMU sensors. Alveofit guides users to use inhalers correctly, detecting errors such as improper angles and inadequate shaking, which are logged in the app along with helpful pointers for improving technique.

For healthcare providers, we invite you to connect with us to learn about the positive results reported by our early adopters. Additionally, we offer an inhaler training device designed for teaching proper inhaler technique to patients in clinical settings. To explore integration possibilities with your system, please reach out to us at info@alveofit.com. We look forward to collaborating with you to enhance patient care.