



CASE STUDY:

Improving Communication, Overall Patient Well-Being with Smart Pill Dispensers

mHealth Improves Patient Peace of Mind

Chronic conditions requiring ongoing medication can present challenges for many patients, especially the growing elderly population who often have multiple medications with different dosing instructions. Today's busy lifestyles add to the challenge and lead many people to wonder, "Did I already take that pill?" We know medication errors in hospitals are very common, unfortunately, harming an estimated 1.5 million Americans each year resulting in \$3.5 billion in extra medical costs, according to the Institute of Medicine's July 2006 report Preventing Medication Errors. If errors are common with trained professionals, it's understandable how easily they can occur when patients and home caregivers are in charge.

The good news is innovative mobile health technology, or mHealth, and Remote Patient Monitoring solutions are helping to improve medication compliance. Utilizing machine-to-machine (M2M) wireless communications, a variety of "smart" solutions are helping take the guesswork and stress out of medication treatment

providing new levels of control while improving patient-doctor communications, ongoing care and peace of mind. The solutions are promising and helping to grow the global mHealth market, which is expected to reach \$49 billion by 2020 with an estimated CAGR of 49.7 according to a recent study by Grand View Research.



Improving Communication, Overall Patient Well-Being with Smart Pill Dispensers

Gemalto Enables the First HIPAA-Compliant “Smart” Pill Dispenser

Sometimes the simplest technology solutions can make the biggest impact. MedMinder’s smart pill dispenser provides the proof. The first connected solution of its kind to provide HIPAA compliance, the MedMinder smart pill dispenser tracks medication intake, sends medical alerts, orders refills and improves adherence to strict medication timing. With secure connectivity enabled by Gemalto’s M2M technology, the solution is also backed by Gemalto’s advanced digital security and encryption solutions.



The advanced mHealth device monitors medication usage and sends data from the pillbox over wireless networks to a HIPAA-compliant cloud-based server. Physicians, nurses and other authorized caregivers can log on to MedMinder’s secure web interface to observe medication adherence and manage changes when necessary. The user-friendly site also offers access to a complete history of medication compliance for simplified reporting.

The solution provides alerts when medication should be taken and patients can chose their preferred method of communication including audio alarm, text message, email and/or a phone call. Caregivers also receive alerts if scheduled doses are missed so that real-time support can be provided for an enhanced level of medical care.

Gemalto: Advanced Digital Security and Ultra-Thin Modules Future Proof mHealth

The MedMinder pill dispenser is powered by Gemalto’s Cinterion® PHS8, the slimmest M2M module on the

market providing secure wireless connectivity, GPS capabilities plus easy integration for a sleek final product. By enabling a full range of M2M features and functionality for all 3G technologies (HSPA+ and five band UMTS) plus a path to next generation technologies, PHS8 ensures reliable global communications today while with room for growth to 4G networks in the future, protecting the long-term technology investment. The module features two antenna pads to optimize consistency and 3G data speeds, up to 14.4 Mbps for downlink and 5.7 Mbps for uplink, even across country and network borders.

The easy to use, Gemalto-powered MedMinder solution helps patients and caregivers manage the day-to-day challenge of medication compliance, a crucial component to overall health and well-being. With reliable connectivity, data security and ease of use, patients and caregivers can rest easy knowing support is always on and available to improve health outcomes.

Visit MedMinder at: www.medminder.com

