### **mMed<sup>™</sup> Patent Portfolio**

for mobile medication management

# mMed Application: Medication Telemanagement Systems for Drug Delivery Devices

# New Directions Technology Consulting is the exclusive market developer of the mMed patent portfolio for medication telemanagement.

The firm has years of experience with drug delivery devices and telemedicine, including in the areas of design, prototyping, clinical trials, manufacturing, subcontracting, marketing, regulatory compliance, and track-and-trace.

The costs of failure to manage medications are well recognized

#### **Supporting Advanced Drug Delivery Devices Is More Important Than Ever Before**

The challenges of providing convenient, effective treatments for the growing populations that require specialty drugs while reducing costs of delivery are well recognized.

Injection and other combination products for self-delivery present special challenges. The FDA has targeted six categories of devices as priorities for human factors review. The categories include insulin pens, artificial pancreas devices, and auto injectors. The FDA also is actively gathering more post-market emerging signals. Many of the challenges can be met by adopting medication telemanagement.

## Adding bidirectional, sensor-based medication telemanagement to advanced drug delivery devices supports:

- Understanding patient human factors and providing training in design phases, clinical trials and ongoing use
- Improved patient retention
- Product channel control through the patient level
- Medication adherence, compliance and lifestyle assistance
- Improved outcomes
- Demonstration of effectiveness to support alternate payment models and other stakeholder opportunities
- Immediate point-of-care access to information to meet REMS and other requirements
- Elimination of self-reporting errors
- Improved quality of life

- Resupply and retention opportunities
- Opportunities for providing service beyond the pill ahead of competitors
- Advantages from patented treatment improvements
- Improved profitability
- Limiting residual risks and liabilities
- Lower overall costs
- Improved concordance among all stakeholders
- Providing the missing information to integrate with vital signs, other treatment markers, and lifestyle events
- A platform for use across multiple drugs and disease treatments
- Corporate reputation for innovation



A system based on mMed patents could include: Capabilities for communications of medication telemanagement data through a smartphone or other device with short- and long-range communications capabilities, and delivery of information to caregivers and/or a central monitoring facility operated by medical professionals.







1. A medication container with embedded sensors and AIDC capability 2. Communication device with integrated applications