ADD Supply Management
TCS Life Sciences – Strategic Business Group

About TCS ADD Platform
TCS ADD is a modern and open drug development platform for life sciences that enables digital ecosystems, simplifies data complexity and provides faster access to new and effective drugs for patients in need. The platform is powered by our proprietary cognitive artificial intelligence engine, data-driven smart analytics and Internet of Things (IoT) that makes clinical trials more agile and safe. TCS ADD leverages the best of cloud architecture and personalized user experience design in compliance with quality guidelines and privacy regulations.

To know more
Visit the https://www.tcs.com/advanced-drug-development page on tcs.com
Email: ADD.Platforms@tcs.com

About Tata Consultancy Services Ltd (TCS)
Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India’s largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com

IT Services
Business Solutions
Consulting
Manual, paper-based processes and information silos have exposed multiple inefficiencies in supply management activities of the life sciences industry. There is a real need to embrace best practices from other industries and adopt emerging technologies, next-generation platforms, and automation to cut costs, reduce site burden, and enhance patient safety and compliance. It has also necessitated the industry make use of advanced analytics and leverage the benefits of digitization.

ADD Supply Management solution automates all activities in clinical trial supply management. It facilitates delivery of the right package, the right information, and the right pill/unit to the right patient at the right time. The solution automates tracking and verification of packages, and pill/unit intake and provides real-time preventive insights in patient medication adherence, thereby increasing safety and efficacy. In addition, medication information is provided in an easily understandable manner and in patient's own language.

Overview

The life sciences industry is plagued with imperfect and complex drug accountability challenges mostly stemming from manual, paper-based processes and multiple, non-connected data systems. This results in an error-prone supply process, lack of supply oversight and insight, and high supply waste. In addition, the current approach lacks integrated and real-time insights into medication adherence, resulting in no way to intervene and alter behaviour. Besides, medication information is provided in a complex, difficult to read, and fragmented manner via multilingual study-specific booklet labels thereby increasing difficulty to understand and comply to the instructions for patient.

The ADD Supply Management is a one-stop solution that addresses these problems by automating & integrating supply activities. Scanning technologies, smart packages and smart pill/unit packages help track all package/kit and pill/unit activities, on the site and at home. The solution applies predictive analytics and automates the analysis of pill/unit medication intake in line with the individual intake guidelines. In addition, the solution's easy-to-understand, all-in-one digital drug labels in local language, collating data from different sources and including an additional quality control, can be accessed by patients or sites through any device.

Solution

The highly customizable ADD Supply Management solution comes with a range of capabilities such as:

- **Kit Tracking:** Facilitates automated & real-time kit oversight & verification, integrated with various RTSM, SAP, EDC systems, and easy-accessible via dashboard and App. For non-RTSM studies it can also be used as a standalone inventory tool.
- **Pill Tracking:** Provides real-time insight and analysis of individual pill/unit intake via sensor-enabled packages; automated data exchange with other systems (e.g. EDC) and verification of individual medication intake. Enables preventive insights, and tailored alerts to patients & sites.
- **Digital Label:** Provides an all-in-one integrated label, that is personalized and easily understandable in patient’s own language. Label data is assembled from different sources (e.g. EDC, RTSM) and includes quality control and real-time insight on label confirmations and label updates.

Benefits

With ADD Supply Management, life sciences industry can achieve the following benefits:

- **Increased efficiencies**
  - Up to 80% reduction in on-site drug monitoring activities, data entry and reconciliation
  - Up to 100% reduction in wrong kit dispensing and high reduction in drug waste
  - Up to 50% reduction in drug non-compliance related dropouts
- **Enhanced data quality and oversight**
  - Up to 60% reduction in drug-related inspection/audit activities
  - Up to 5% reduction in data management queries related to drug accountability.
- **Increased Customer Engagement**
  - Increased understanding and access to complete drug information
  - Reduced administrative burden and increased patient safety
- **Meaningful insights and prevention**
  - Direct insight into medication intake and behavioral changes at home
  - Potential to develop drug medication intake models and novel insights
- **Faster drug registration process**
  - Ability to combine individual studies and alter medication intake on-the-go
- **Quicker go/no-go decisions**
  - Less guess work on actual medication intake enabling faster decision making to continue with a compound and avoid set-up of expensive phase II & III studies.

The TCS Advantage

By partnering with TCS, life sciences enterprises can leverage:

- **Cross-industry development:** Our solution has been developed as a result of cross-industry collaborations, including input from more than 15 pharma companies, medication & technology suppliers, and patients and sites via face-to-face workshops & events.
- **Modular, open tenant, scalable platform:** ADD Supply Management has been designed to be an open platform, enabling integration with various existing RTSM, SAP, EDC systems and any type of smart (pill/unit) packages (e.g. barcode, NFC, Bluetooth). The solution is highly modular, scalable to any level, and capable of being implemented separately as well as in combination, to support various business requirements.
- **Industry-awarded solution:** ADD Supply Management has been the recipient of the 2019 European Innovation Award for exhibiting applied strategic innovation in the areas of partnerships, deployments, and collaborations, and thereby manifestly improving the clinical trial process.
- **Cross solution integration:** The solution supports easy and seamless integration with other TCS ADD offerings such as ADD Patient and Site Engagement, thereby further enriching patient and site experience throughout the study journey.
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