

TECSYS' **Smart** Data Capture Technologies



Time is
of the
essence in
healthcare

“Sustainable
data integrity
is impossible
without
consistent
compliance”

smartbin



Aligning technology to workflows

The smartest data capture methodologies are those that are so natural and invisible that you don't even know they are collecting data in the background.

When data capture comes at the cost of disruptions to workflows and manual data entry, the result is low and inconsistent compliance. Making informed decisions requires high data integrity, so some organizations close those data gaps with reconciliation activities. We believe it is better to *begin* with consistent compliance, and avoid data integrity issues in the first place.

The *smartbin*™ is a great example of how to facilitate high compliance, because clinical staff simply have to dispose empty packaging. With that action, all the required data connected to consumption is captured and acted upon without any further involvement from them.

Smart data capture is when you don't even know it's happening



Frees up time through improved replenishment & automated workflows

- Eliminates the need for clinical staff to collect data and manually transcribe supply utilization
- Automates data transfers to host applications (MMIS, ERP, EMR, billing) for auto-triggered replenishment, requisitions, and status notifications, and by extension, eliminates errors in the reordering process
- Links product usage to patient records for UDI tracking and billing purposes
- Provides access to real-time information in order to improve and expedite expiration and recall management

Improves margin by reducing supply wastage & revenue leakage

- Reduces the costs associated with product expiration, complex invoice and inventory reconciliation
- Ensures supply usage is accurately captured and transferred for reimbursement purposes, where appropriate

How it works

When products requiring unitary traceability are received, the manufacturer's barcode on each product is scanned to record the serial/lot number and expiry date.

TECSYS' *useIT*[™] application automatically links this data to the unique identifier of an RFID transponder embedded in a printed label. The product's designated replenishment location is printed on the label, which is then affixed to the product packaging.

The product's delivery to the designated user department room is verified by swiping it in front of an RFID reader near the entrance. The product is then placed in the storage location printed on the affixed RFID label.

Consumption data is captured when clinical staff dispose of the product's empty packaging in the *smartbin*[™] located in the procedure room. Based on customizable business rules, a replenishment requisition is triggered. At the same time, the interface engine sends relevant data to host applications, such as the patient record (EMR), the material management information system (MMIS) or applicable financial applications.

This removes clinical staff from the reordering process, eliminates time spent on transcribing, while providing precise traceability and case costing information.



smartpanel



Making best practices even better

The *smartpanel™* enhances the two-bin/kanban best practice for replenishment of general supplies in a hospital by removing a time-consuming manual process. A common practice today is to send logistics staff to the point of use to perform demand assessments through cycle counting. Therefore, while this barcode-enabled two-bin replenishment practice eliminates counting of individual stock levels, on-the-ground resources are still needed to scan at the point of use.

The *smartpanel™* eliminates the need to perform these demand capture rounds altogether and provides real-time demand information across the frontline of service based on actual consumption. Up-to-date and accurate replenishment needs are achieved with minimum effort from clinical staff, equating to approximately 1 transferred location tag per nurse in a 12 hour shift in a typical nursing unit consumption cycle.



How it works

The RFID-enabled two-bin replenishment solution begins with an established quantity of a given item divided into two batches and stored in primary and secondary compartments of a single storage module. When the primary compartment is empty, clinical staff transfer its identification tag (containing an RFID transponder) to a wall-mounted smartpanel™ located near the storage unit. They then begin using items from the secondary compartment, which holds a set quantity of inventory to cover demand during the replenishment cycle. Placing the primary compartment's tag on the smartpanel™ triggers an automated replenishment request before critical supply thresholds are met.

The system transmits the request to the *useIT™* application and, prompted by customizable business rules, onward to the hospital's material management information system, which then generates a pick list for stock items or a requisition for direct purchase items. During their delivery rounds, material management staff transfer the remaining supplies to the primary compartment and replenish the new supplies in the secondary compartment while returning the corresponding location tag to the primary compartment to conclude the replenishment cycle. This ensures stock rotation and helps prevent stock wastage due to expiration and communicates replenishment status to users without the need for demand capture rounds.



Dynamic Touchscreen

Accurate supply information and real-time lookup functions (such as alternative product availability locations in the case of a stockout) are available directly in the supply room, tethering point-of-use demand to the global supply chain infrastructure.



Hot Spot

Any RFID tag placed on this spot will activate a real-time information overview of the associated product on the integrated dynamic touchscreen.



LED Indicators

A series of programmable multi-colored LED lights provide instant feedback on products' replenishment status, from processing to backorder.



Dedicated Antennas

Unique directional antennas enable accurate per SKU monitoring, and allow the *smartpanel*™ to be mounted free of common restrictions such as metal doorframes.



Work **smarter** Not harder

Logistics staff gain access to accurate demand information

- Eliminates the need for demand capture rounds
- Allows periodic and ad hoc supply location optimization to be performed within the storage environment
- Shortens the replenishment put-away process through visual cues

Clinical staff gain access to real-time information directly in the supply room

- Provides visibility into to the status of backorders and stat orders
- Instantly displays alternate supply location availability
- Cuts out wasted time searching for supplies that are out of stock

smart cabinet



Locking in control & efficiency

The *smartcabinet*[™] lets you track and monitor high cost items. An all too common practice today is to rely on clinical staff to manually log what product was taken and when, and still send logistics staff to the point of use to perform demand assessments.

Using RFID-enabled access control, the *smartcabinet*[™] eliminates these manual steps, creating a less cumbersome process for clinical staff, and a more timely and accurate record of replenishment needs. Secure user access and automatic product data capture ensure product and inventory integrity, improved regulatory compliance, and gives you real-time visibility of your most expensive inventory.

When it's
intuitive,
there's
**no manual
needed**





Track and monitor medical devices automatically and in real-time

- Captures usage automatically
- Eliminates the need for demand capture rounds
- Protects your highest cost items from loss and pilferage
- Maintains product integrity and thresholds for critical items like bone & tissue
- Preserves temperature-sensitive products within a controlled storage environment

Capture product-related information required for improved reimbursements

- Logs user access for traceability and security audits
- Automatically records supply movements
- Establishes full accountability into chain of custody, charge capture rates, event registration and waste
- Improves regulatory compliance

Protect your highest value products



RFID Cabinets



RFID Freezers



RFID Refrigerators

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