Tremesa
Solutions

Importance of Traceability in Ensuring Patient Safety

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Solutions

- Data Capturing Solutions for tracking & traceability
- Asset Tracking System
- Document Tracking System
- Manufacturing Execution System (MES)
- Advance Planning & Scheduling System (APS)
- Warehouse Management System
- Customize Software Solutions

Product

- Labels , Tags , Ticket & Wristband
- Thermal Ribbons (Wax, Wax Resin & Resin)
- Barcode Printer (2" to 10")
- GHS and Colour Printer
- Barcode Scanner & Mobile Terminal

Services

- Technical Support
- Maintenance Service

About Us

Tremesa Solutions Sdn. Bhd. is a fast growing and leading provider of data capture and labelling solutions with local operations across Malaysia.

TREMESA has been establishing successful solutions for corporations ranging from manufacturing, healthcare, logistic to retail industries.

We provide a comprehensive of top-notch products, services and solutions to help the way businesses manage their data and daily activity.

By specializing in automatic identification and data capture, our professional team is able to provide the right hardware and software to create the right solution for your business needs.

We have appointed partner across Malaysia to provide better support and value added services to our customer.

What is Traceability?

- The possibility to follow the forward movement of products at specified points within the entire chain (*tracking*);

- The possibility to retroactively trace the location, history (product ID) and storage parameters of products (*tracing*).

- The study shows that there are two major motivators for the further optimization of the track-and-trace process.

- On the one hand, better traceability can increase the quality of both products and services for the customer/patient.

- On the other, the legal framework is also an important motivator, especially when it comes to the transport and storage of temperature-controlled products.

Current Situation vs Expected Situation

Current - Without Barcode / Traceability Solution

- Receiving of items, drugs, stocks, etc are handled manually and updated into system by batch

- Patient admission upon registration does not have any special identification or easy recognition

- Administration of medicines or drugs to patient are by hardcopy identification without any clear instructions or information

- Dispensing of medicines or drugs not in proper dosage or identified wrongly without any proper identification

- No traceability of movement and usage of medicines, drugs, and stocks

- No proper labeling information for easier reference

Expected - With Barcode / Traceability Solution

- Receiving of items, drugs, stocks, etc are labeled and scanned upon receiving and updated real-time into system

- Each patient are issued a wristband upon registration until discharged – each process or administration requires scanning for traceability purpose

- Staffs are required to scan patient's wristband to identify the necessary medicines or drugs to be administered – scan each item for validation before administering or dispensing

- Traceability of medicines, drugs, devices, stocks, etc as each scanning will tie the usage of which patient to which or what items

- Label printing solution with 1D or 2D barcode and human readable information
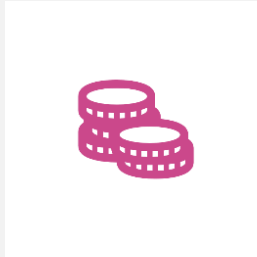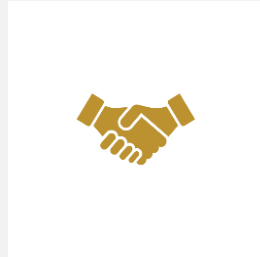
Challenges to Implement Traceability Solution

Challenges

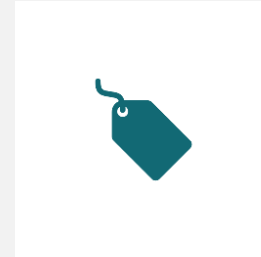Complexity of the supply chain from production unit to usage phase

Financial

Traceability solution does not come cheap and usually involves more than one party
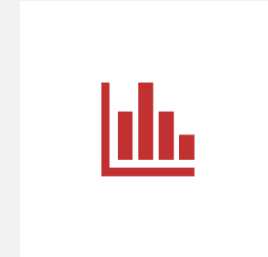
Trust

Traceability requires trust from all parties that are involved in the usage of drugs, medical devices, etc.

Cost

Solution cost can and could be shared among all parties involve as it will be beneficial to all parties

Margins

Implementing a traceability solution might affect profit margin

How to Trace

Using barcode technology to provide a traceability solution from the 1st process till the end to ensure proper control and safety

Label Printing

- Using barcode printers to print labels for easier identification

- Printing can be directly and connected to HIS database without jeopardizing patients' information

Scanning Label & Validation

- Upon any process administered to patient, scan patient's wristband to validate administered process is correct and accurate

- Using system to validate instead of human dependency

Data Logging / Report

- Log and save data from every transaction and activity administered

- Trace who, when, where, what, why and how with a proper SOP and system in place

Main Benefits

- **Patient safety**
  - Fewer medication errors (wrong medication administered to patients)
  - Fewer counterfeit products
  - Specifically for temperature-controlled products:
    - Less damage
    - Fewer expired products
    - Fewer product risks
    - Better product quality

- **Turnover and costs**
  - Better customer service
  - Fewer claims and complaints
  - Theft prevention
  - Specifically for temperature-controlled products:
  - Fewer losses
  - Better reverse logistics

- **Efficiency and control**
  - Better stock management
  - Better asset management
  - Better data management
  - Simplified administration
  - More efficient logistics (ordering, receipt of orders, reduction of lead time)
  - Quicker identification of reverse logistics

- **Legislative framework**
  - Safety requirements
  - Specifically for temperature-controlled products:
  - Legal requirements
  - The impact of these advantages strongly depends on:
    - The position within the supply chain;
    - Whether or not the organization has a stock management system;
    - Whether the organization owns the stocks;
    - How sophisticated the currently used systems and technologies are;
    - The degree of integration between the track-and-trace data and the back-office system.

- In the past few years, traceability or *track and trace* has become increasingly important in the health care sector, but its importance differs according to the position in the supply chain.

- Product quality and legal requirements are the main reasons for further optimizing product traceability. While the advantages are significant, problems still occur regularly, mainly with temperature-controlled products.

- The large number of players in the supply chain and the lack of an efficient (mutual) communication are considered the main barriers to eliminating these problems However, every player in the chain still has enough reasons to focus on this topic.

- In conclusion, there is definitely still scope for improvement to guarantee the optimal traceability of a product from the production unit to its use or administration.

Summary / Q&A

Please feel free to ask if you have any questions ☺

Thank You

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