



Improving Care. Improving Business.®

RFID: The Crystal Ball to Actionable Insights

www.deroyal.com

Audience



- **Tennessee Society for Organization Improvement:** TSOI supports hospitals and healthcare organization's journeys in creating a performance improvement culture.
- www.linkedin.com/company/tnsoi



- **The Society for Health System:** SHS is a resource and support association that serves the needs of healthcare professionals throughout the world by contributing to the improvement of healthcare processes through systems engineering, analysis and process improvement methods.
- www.iise.org/SHS

Presentation Objectives

- Overview of DeRoyal
- RFID Introducing
- Using RFID in Healthcare
- RFID in Healthcare Applications
- Q&A

Our Purpose

Improving Care.

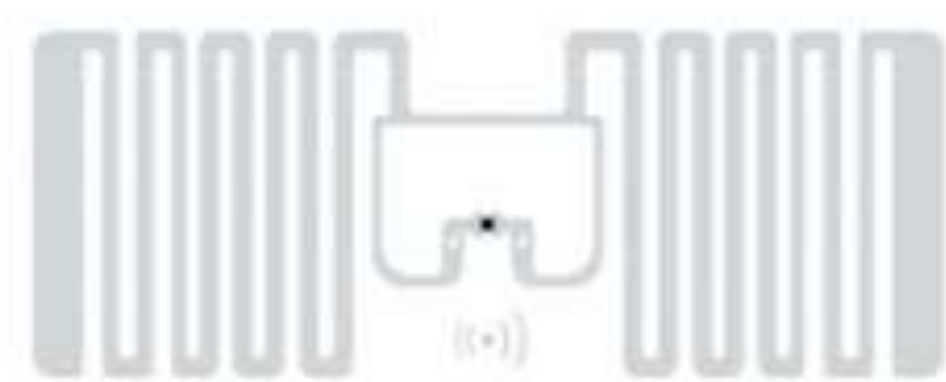


Improving Business.

WHAT IS RFID?

RFID (Radio Frequency Identification)

The use of a wireless system to transmit data from tags on items to a receiver to automatically identify and track objects, people, and products through the supply chain.



PURPOSE OF RFID IN HEALTHCARE



- Inventory visibility & accuracy
- Effective recall management
- Accurate clinical documentation
- Patient safety & care
- Payments & increase profitability



- Product expiration, shrinkage, and waste
- Supply chain costs
- Manual supply chain activities
- Risk of hospital-acquired infections
- Medical errors due to misidentification

RFID APPLICATIONS

Applications



Patient Care &
Experience



Supply Chain
Management



Point of Use

PATIENT CARE & EXPERIENCE

RFID Enables:

- **Patient satisfaction** - Ease of transition from hospital to home
- **Patient healing** - Quality product and access to care benefits
- **Staff satisfaction** – Increased automation and streamlined processes

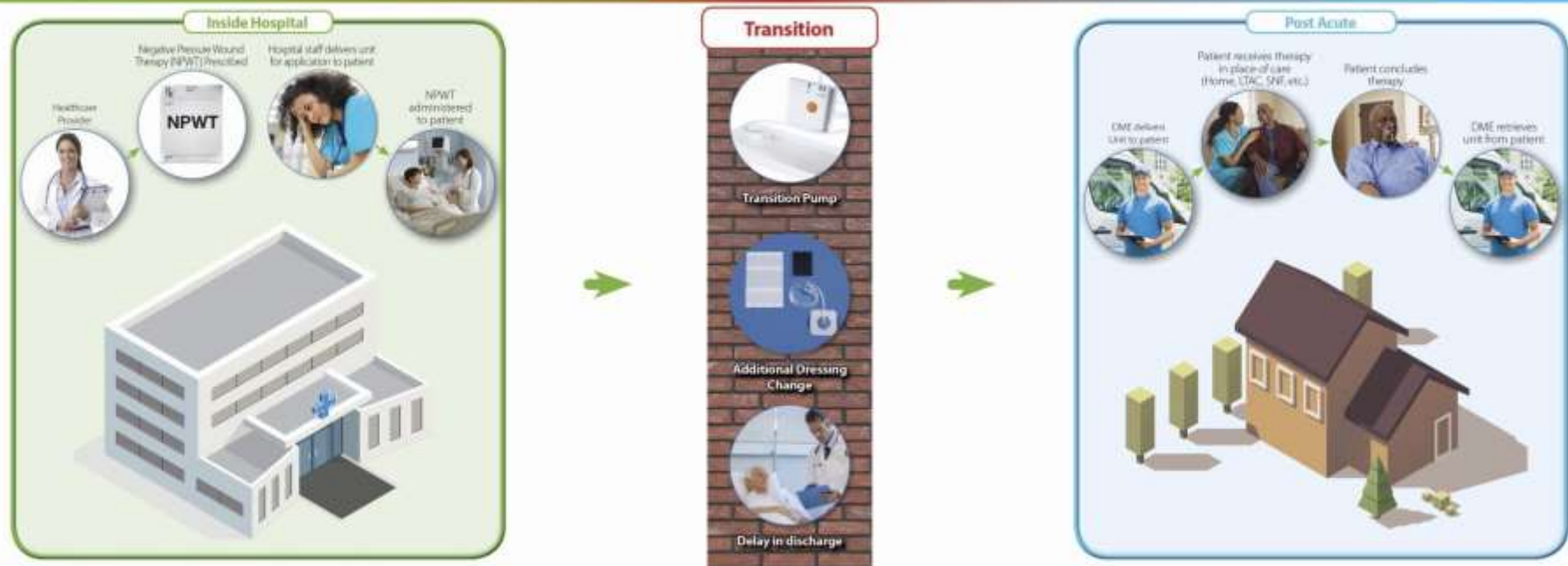


PATIENT CARE & EXPERIENCE CASE STUDY

Case Study Level 1 Trauma Academic facility using RFID to track Negative Pressure Wound Therapy Devices

- Decreased hospital delayed discharges
- Improved patient and staff satisfaction due to ease of transition
- Significant cost savings benefits with product and program
- Decreased nursing times, decreased unnecessary dressing changes, improved patient experience

PATIENT CARE & EXPERIENCE CASE STUDY



Hospital – 1st Pump

- \$50-125 per day per pump
- Lost pumps
- Inconsistent billing

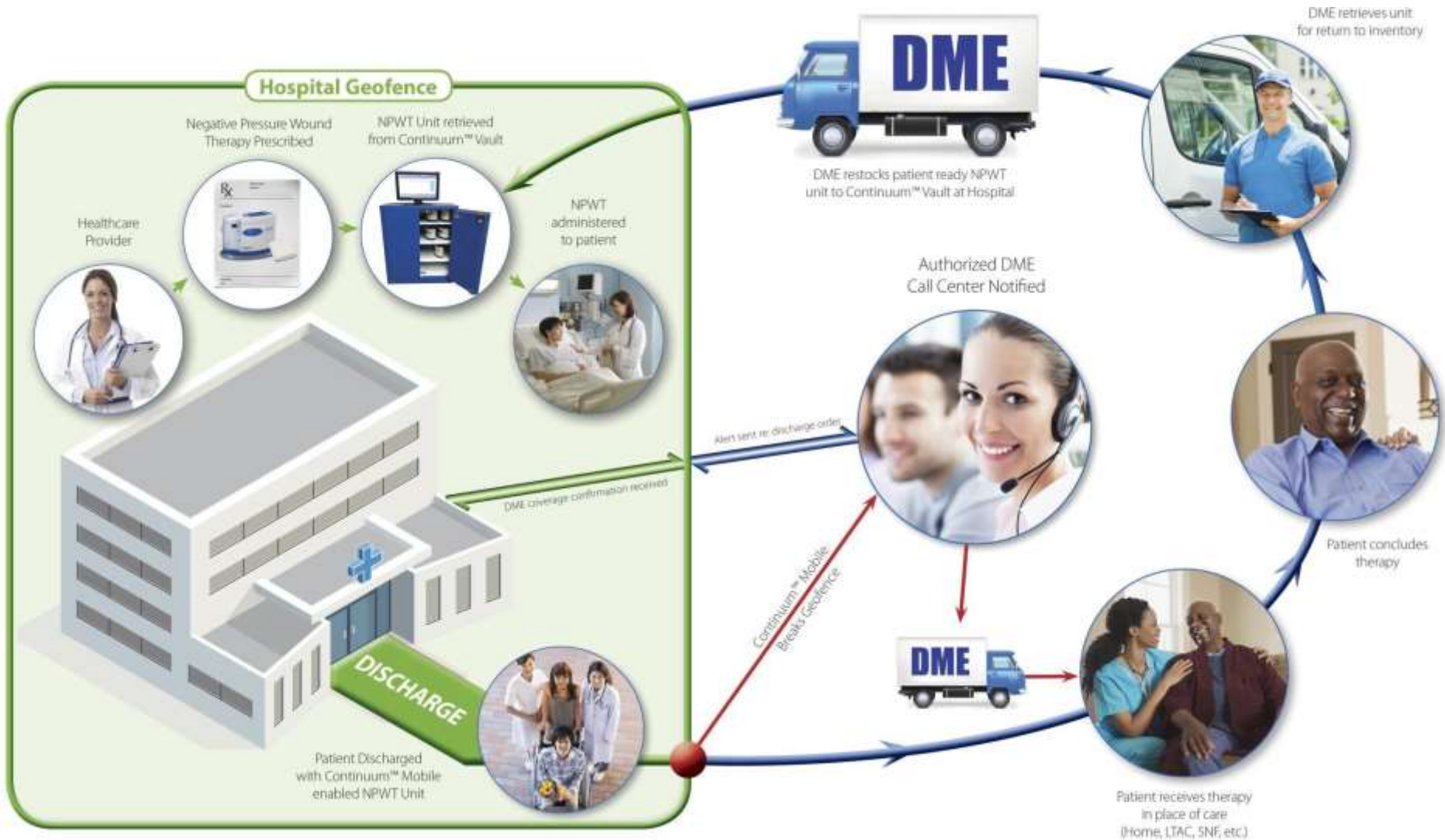
Transition – 2nd pump

- Transition Pump (\$600-900)
- Additional dressing change
- Delay in Discharge (\$800-5000 per night)
 - 3 hrs – 3 days

Post Acute – 3rd pump

- Device Change

ONE PUMP ONE PATIENT WITH CONTINUUM RFID



PATIENT CARE & EXPERIENCE CASE STUDY

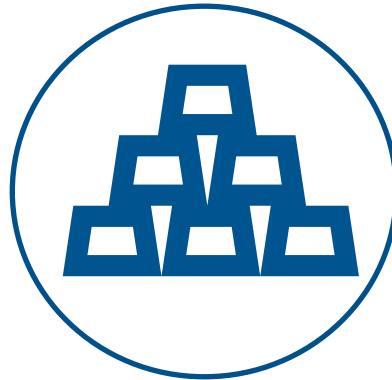
Outcomes

- Reduced discharge time - **28** minutes per patient
- Eliminated **90%** of “extra” dressing changes
- Increased ability to release patients with hard to match insurance (14 patients would have stayed in-hospital)
- Eliminated extending hospital stays due to waiting on units
 - **40%** of patients released after hours or on non-dressing change days
 - **2** lost units were recovered – savings of approx. **\$20,000**
- **Annualized savings +\$1.1M**

HEALTHCARE SUPPLY CHAIN MANAGEMENT



Asset



Supply



Consignment



Pharmaceutical

- Reduce human error
- Time savings
- Unique Device Identifier traceability
- Disaster prevention

RFID SUPPLY MANAGEMENT

- Inventory visibility
- Expiration management
- Simplified recalls

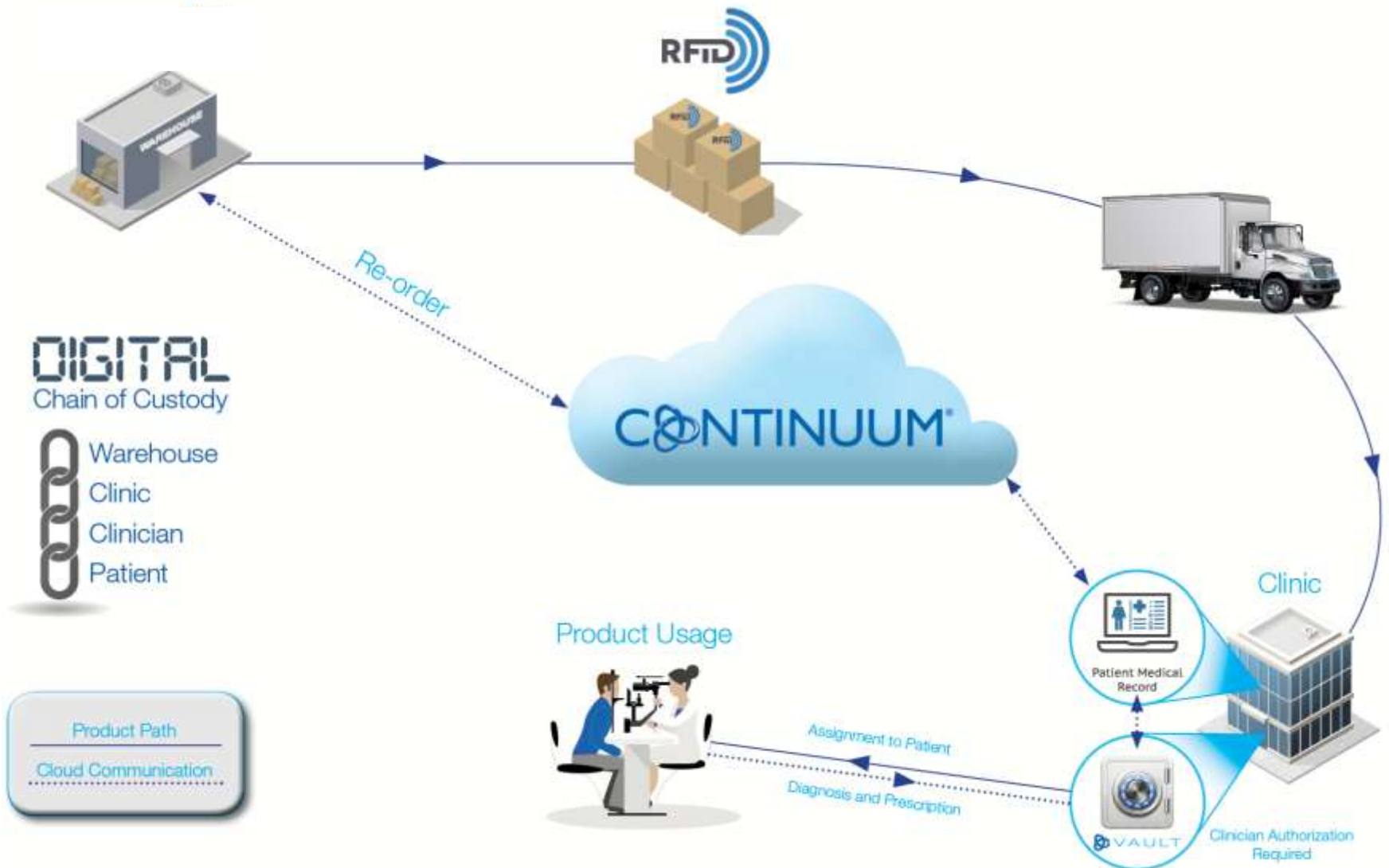


RFID CONSIGNMENT MANAGEMENT



- Controlled access
- User compliance
- Expiration management
- Simplified recalls

COLD CHAIN CUSTODY TRACEABILITY



RFID SUPPLY MANAGEMENT

Outcomes

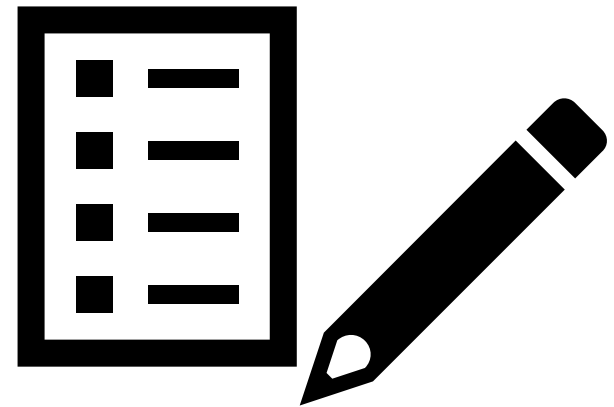
- **80%** time savings on inventory related activities (counting, reordering, expiration checks)
- Proactive expiration monitoring and alerts

Products Expiring ^		
Details...		
Number of Days:	Expired	Expiring
<input type="text" value="365"/>	0 (\$0.00)	26 (\$163,587.50)

RFID POINT OF USE CAPTURE

Current State

- Manual documentation completed by circulating nurse
- Cumbersome due to inaccurate doctor preference cards
- Manual search and entry
- Supply chain relying on data that is oftentimes inaccurate



RFID POINT OF USE CAPTURE

- Clinical documentation accuracy
- Nursing time focused primarily on patient care
- Unique Device Identification tracking to the patient



99.7%
Charge
capture
accuracy rate

20 mins
Nursing time
redirected to
patient care

RFID IN HEALTHCARE SUMMARY

**Improved
Patient Care**

**Increased
Inventory
Visibility**

**Passive Data
Capture**

**Inventory
Control &
Compliance**

**Streamlined
Operations**

**Cost Savings
& Revenue
Capture**

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thank you



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