

# Medical Devices

Roundtable Discussion: Leadership exchange on key trend drivers and supply chain transformation

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Roundtable Discussion: Leadership exchange on key trend drivers and supply chain transformation



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# What is it we are going to do?

## Roundtable Discussion:

Moderated discussion on a series of hypotheses around the future of medical devices supply chains

*The Roundtables are held under the „**Chatham House Rules**“ which means, that participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.*

**45'  
MIN**

## Industry Trends - 10'

Shaping Future Supply chains

## Discussion - 25'

Exchange of viewpoints on

- Network Design
- Inventory Management
- End to End Visibility
- Product Complexity
- AI driven supply chain

## Making the Next Step - 10'

Solutions and Collaboration



## Demand Volatility Driven by Shifts in Care Delivery

“Demand patterns in medtech are becoming **less predictable and more fragmented**, driven by shifts in care settings, procedure mix, and adoption cycles. Volatility is no longer episodic—it’s **built into the system**”.

“**If volatility is now structural, can traditional forecasting ever catch up?**”

# Regulatory & Traceability Are Becoming a Supply Chain Design Driver

Regulation is **no longer just a compliance overlay** - it increasingly **dictates** how supply chains **must be designed and operated**

**“Are regulatory constraints now shaping supply chain architecture more than cost optimization?”**

# SKU Proliferation Is Accelerating - Complexity Costs Are Lagging Visibility

**Product portfolios** are **expanding faster** than supply chains are being simplified. **Complexity** often **accumulates incrementally** and invisibly.

**“Is SKU proliferation still a growth enabler - or has it become a margin and service risk?”**

# Resilience has become a Board-Level Requirement - Not a supply chain choice

Geopolitics, supplier concentration, and transportation risk have reframed the supply chain objective: **from lowest cost to assured continuity of supply.**

**“Have we truly accepted that resilience will structurally cost more?”**

# Digitalization is shifting supply chains from Reactive to Predictive

Advanced planning, control towers, and AI are **moving from pilots to production** - but adoption varies widely across companies & subsectors.

**“Will future supply chain performance depend more on algorithms than organizational experience?”**

## DISCUSSION

Hypothesis 2: Inventory Strategy

**“Medtech companies will need to structurally increase inventory to ensure service levels - lean will no longer be viable.”**

A large medical CT scanner in a clinical setting. The machine is white and blue, with a large circular opening in the center. A patient bed is visible in the foreground, extending from the scanner. The background is a plain, light-colored wall.

## DISCUSSION

Hypothesis 3: Visibility & Control Towers

**“Without full end-to-end visibility, supply chains will become unmanageable within 5 years.”**

## DISCUSSION

Hypothesis 4: Complexity vs. Growth

**“SKU and product portfolio complexity will become the biggest profit killer in medtech supply chains.”**

## DISCUSSION

Hypothesis 5: AI-driven Planning

**“Within 5 years,  
most planning  
decisions will be  
automated, not  
human-driven.”**

# Potential solutions



# DEVICE FINAL MILE

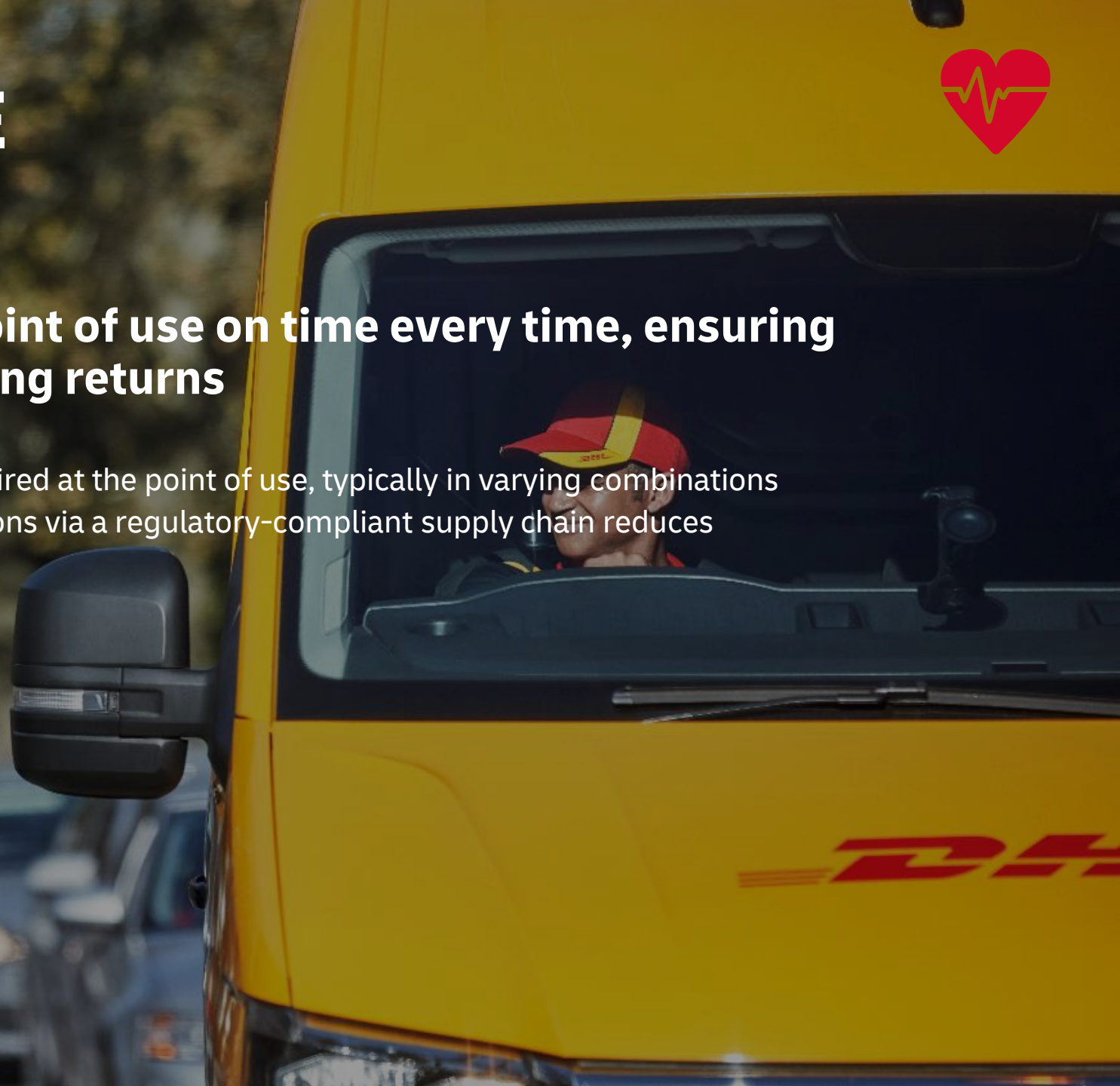


## Bringing medical devices to the point of use on time every time, ensuring regulatory compliance, and handling returns

Implantable devices and surgical equipment are required at the point of use, typically in varying combinations for each patient. On-time final-mile delivery to surgeons via a regulatory-compliant supply chain reduces stock holding at the hospital.

### TYPICAL BUSINESS CHALLENGES

- Enabling customized deliveries & returns
- Managing stock to ensure availability
- Ensuring efficient returns flows
- Achieving full device visibility & control
- Ensuring compliant processes



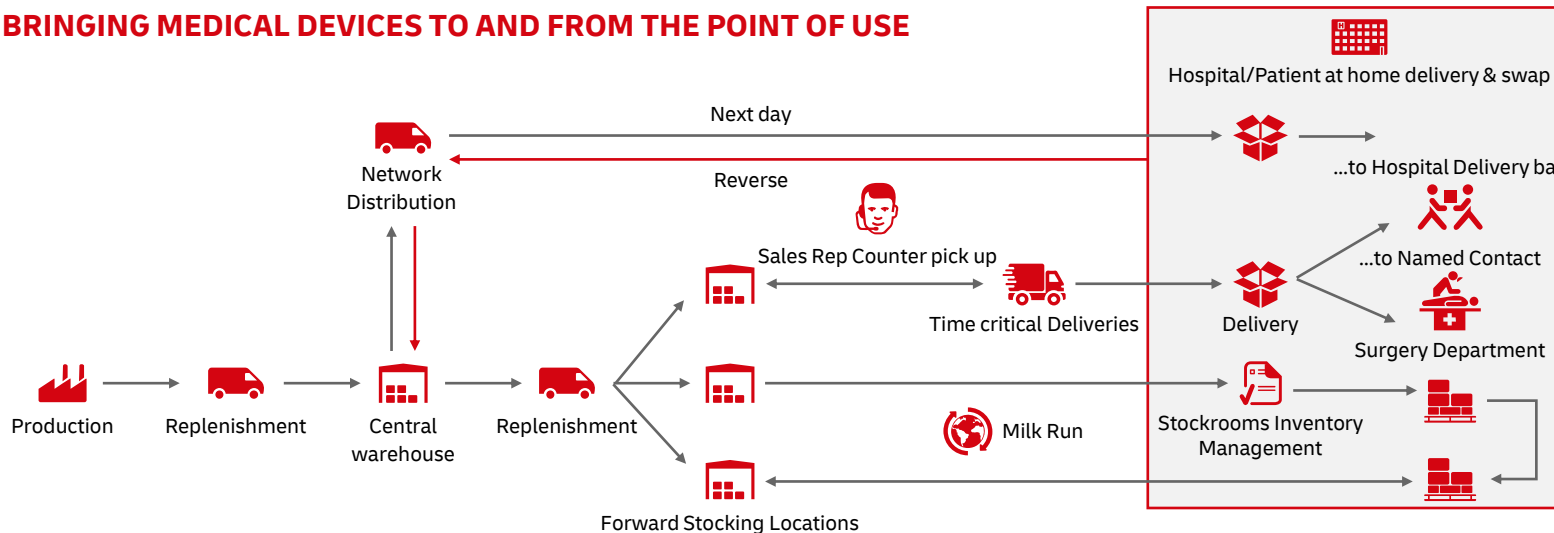
## DHL SOLUTION

This multi-node final-mile solution for implantable devices and surgical equipment combines inventory management with customized delivery. Stock is stored in regional distribution centers and forward stocking locations (FSLs), including micro-FSLs within hospitals for specific delivery direct to surgeon.

### SOLVING YOUR BUSINESS CHALLENGES

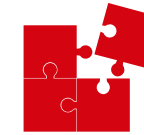
- ✓ **Enabling customized deliveries & returns** – To/from named persons, wards, and near operating theaters; 4-hour emergency delivery; sterile delivery for scheduled surgeries; replenishment milk runs; effective, coordinated returns flow of used/unused devices and instrument kit rotation
- ✓ **Managing stock to ensure availability** – Expiry date management; redeployment of inventory with short use-by dates; relocation of inventory; unique identifier or batch number tracking
- ✓ **Ensuring efficient returns flows** – Realize full lifecycle asset value with efficient device collection, repair, sterilization, and re-use; unique identifier or batch number tracking
- ✓ **Achieving full device visibility & control** – Single global IT platform; visibility in the field and within stocking locations; 24/7 inventory accessibility; final-mile real-time inventory and shipment visibility
- ✓ **Ensuring compliant processes** – ISO 13485 and GxP (good practices) quality management systems; multi-tiered storage with climate-controlled ambient environment (15-25C); segregation from non-life sciences inventory

### BRINGING MEDICAL DEVICES TO AND FROM THE POINT OF USE



## DEVICE FINAL MILE

### KEY BENEFITS FOR YOUR BUSINESS



#### TAILORED

Adaptable to specific service requirements

#### STANDARDIZED

For efficient and agile operation



#### ADVANCED



Leverage DHL's multi-user forward stocking network

#### COMPLIANT

Quality management system; monitoring of all relevant supply chain events



# INVENTORY OPTIMIZATION & PLANNING



## In-depth analytics and life sciences expertise to solve complex supply chain challenges for medical device manufacturers

Medical device manufacturers must review the supply chain network whenever the business strategy changes or new markets open up, and when there's a merger or acquisition. To implement changes, it's essential to agree a feasible roadmap.

### TYPICAL BUSINESS CHALLENGES

- Avoiding overstocking & stockouts
- Coping with complexity
- Combining expertise in both analytics & life sciences
- Balancing service levels & cost
- Comparing 'what-if' scenarios
- Including qualitative analysis

## DHL SOLUTION

For the on-time availability of medical devices at the point of use, this service helps achieve ideal inventory levels locally, regionally, and globally. It delivers applied analytics skills, life sciences logistics consulting, advanced IT planning and optimization tools, and an implementation roadmap.

## SOLVING YOUR BUSINESS CHALLENGES

- ✓ **Avoiding overstocking & stockouts** – Inventory stocking policy at item (SKU) level; inventory positioning across a network of local, regional, and national warehouses, distribution centers, and forward stocking locations
- ✓ **Coping with complexity** – Decentralized database; accurate network flows
- ✓ **Combining expertise in both analytics & life sciences** – DHL experts provide applied analytics skills and capabilities along with unrivalled logistics consultancy knowledge and experience specific to the medical device supply chain
- ✓ **Balancing service levels & cost** – Total cost analysis with adherence to agreed service levels; considers and quantifies direct costs (warehousing and transportation) and indirect costs (inventory, obsolescence, and lost sales)
- ✓ **Comparing ‘what-if’ scenarios** – Various network setup scenarios and inventory positioning options
- ✓ **Including qualitative analysis** – Also considers hard-to-quantify parameters (real estate price trends, labor availability, trade agreement impact, etc)

## SOLVING COMPLEX SUPPLY CHAIN CHALLENGES FOR MEDICAL DEVICE MANUFACTURERS

# INVENTORY OPTIMIZATION & PLANNING



### KEY BENEFITS FOR YOUR BUSINESS



#### ROADMAP

Turns analysis into real operations aligned with business priorities

#### PEACE OF MIND

Rely on DHL’s extensive consulting and analytics expertise



#### AVAILABILITY



On-time availability of medical devices

#### FLEXIBLE

Network setup adjusts according to market size



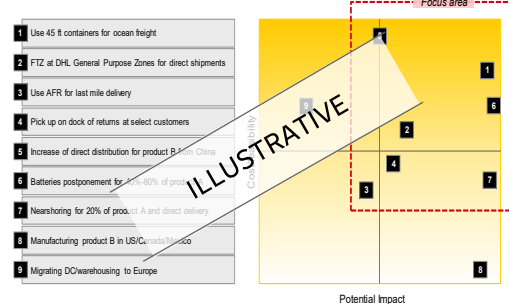
### Sample Deliverables



#### Scenario Modeling



#### Feasibility-impact Analysis



#### Implementation Roadmap

