

# Revolutionizing the Supply Chain for Physician Preference Items

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# Agenda

- Introductions
- Company overview
- Fixing a broken supply chain
- Collaboration for success

# Cardinal Health overview

## **Recognized Leader in Healthcare Supply Chain Transformation**

- Ranked #1 by Gartner 2011, 2012, 2013, in transforming the healthcare value chain to meet new challenges around costs, revenue and outcomes.

## **Unparalleled Understanding of Healthcare Value Chain**

- Supplier and leading manufacturer of med/surg products
- Leader in providing supply chain services
- Built on a solid base of +40 years experience

## **Building for the Future of Healthcare**

- Investments in innovative technology and data solutions
- RFID footprint in 41 countries
- Tracking medical devices in over 4,000 hospitals
- 300,000 products in dictionary
- 9,500,000+ RFID tagged products
- 10,000,000+ inventory transactions per day
- 10,000,000,000+ tag reads

# BJC Healthcare overview



- Based in St. Louis, MO
  - 11 Hospitals
  - Academic, Large and Small Community and Rural Hospitals
  - Physician Practices, Home Care, Occupational Health, Behavioral Health
- \$4B in revenue
- Approximately 26,000 employees
- \$892M supply spend
- Consolidated supply chain management function

# Cook Medical overview

- Based in Bloomington, Indiana
  - 10 Strategic Business Units (SBU's)
  - 8 Manufacturing locations
    - 5 North America
    - 2 Europe
    - 1 Australia
- Product mix across 10 service lines
- Privately held company
- Over 10,000 employees world wide
- Consolidated Shared Service Center (SSC)
  - Located in Bloomington



# A very complex supply chain



**Rising product costs**



**Manual/multiple inventory systems**



**Complex nature of product stocking**

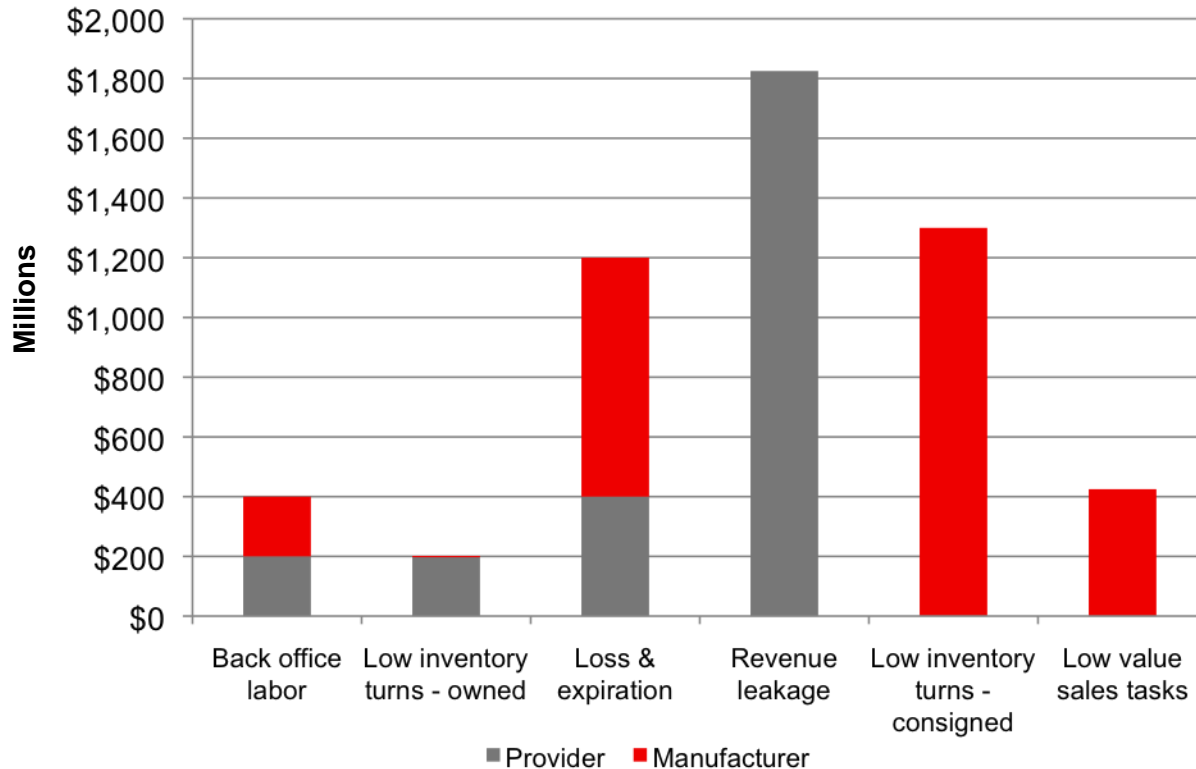


**Barriers to data sharing**

... especially in high value items



# Immense waste in the supply chain



## Does not include indirect costs of:

- Excess time spent by nurses searching for inventory
- Time spent (or patient risk) during product recalls
- Risk of non-compliance with FDA/UDI regulations

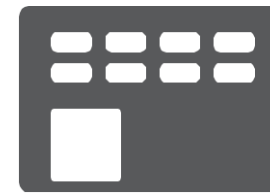
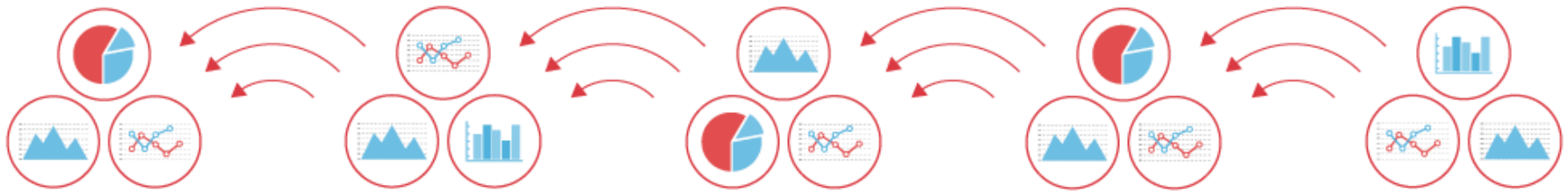
**10%-30%<sup>1</sup>**  
Waste in PPI supply chain

**\$5,000,000,000<sup>2</sup>**  
Estimated loss per year

1- Modern Healthcare "Losing preferential treatment" (Feb. 2013)  
2- PNC Healthcare; GHX quantitative research study (August 2011)



# How do things work in retail?



Manufacturer

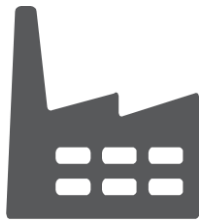
Distributor

Distributor

Supermarket

Consumer

# ...and for a pacemaker?



Manufacturer

Hospital

Patient

# Historical approaches no longer working

- Price pressure on manufacturers
  - Margins have already eroded
  - Products are getting commoditized
  - Medical device tax

**10%-30%<sup>1</sup>**  
Waste in PPI supply chain

**\$5,000,000,000<sup>2</sup>**  
Estimated loss per year

- Consignment is not working for anyone
  - Very expensive for manufacturers
  - High expense factored into cost of product for providers
- Bulk buys without data are a net negative

1- Modern Healthcare "Losing preferential treatment" (Feb. 2013)  
2- PNC Healthcare; GHX quantitative research study (August 2011)

**Truly transformative thinking is needed**

**A shift in focus is  
needed to address waste  
and inefficiency**

# Pain points



## Medical device manufacturers

- Trunk stock
- Manual audits
- Demand planning
- Expiration
- Shipping costs
- Overstocking
- Consignment
- Out of stocks

# Pain points



## Hospitals

- Expiration
- Shipping costs
- Overstocking
- Consignment
- Out of stocks
- Labor costs
- Charge capture
- Bulk purchases
- Inventory shrinkage

# Shared pain points, shared goals



## Medical device manufacturers

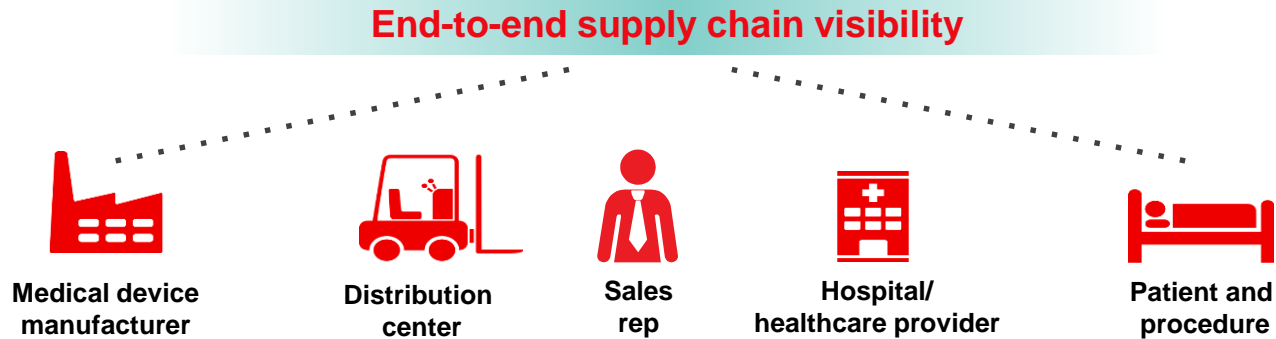
- Trunk stock
- Manual audits
- Demand planning



## Hospitals

- Expiration
  - Shipping costs
  - Overstocking
  - Consignment
  - Out of stocks
- Labor costs
  - Charge capture
  - Bulk purchases
  - Inventory shrinkage

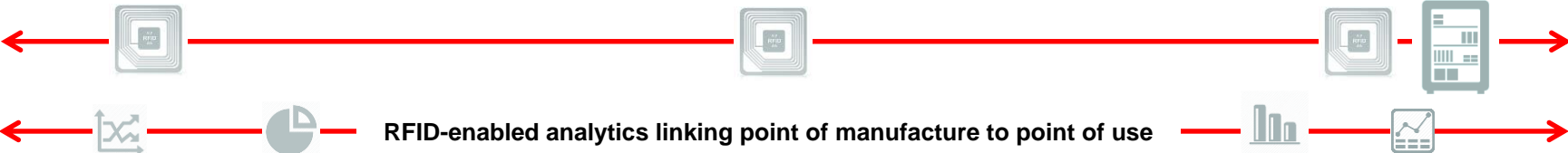
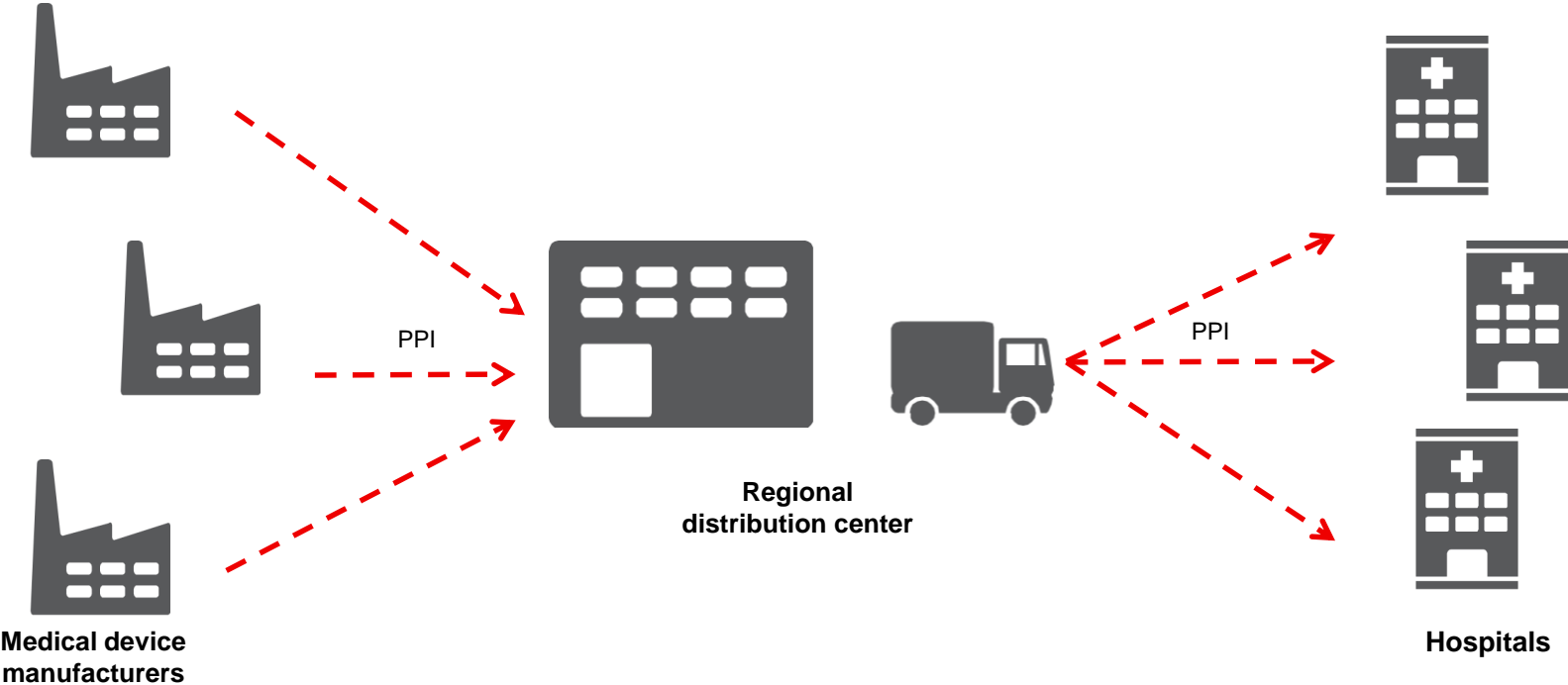
# End-to-end supply chain visibility on a shared data platform



- Enabled by:
  - High compliance RFID-based technology and processes
  - RFID standards
  - A common data platform
  - An analytics platform
  - A supply chain foundation



# An end-to end supply chain for PPI



# Changing the game: A real life example

# A true collaboration

## Gaining alignment

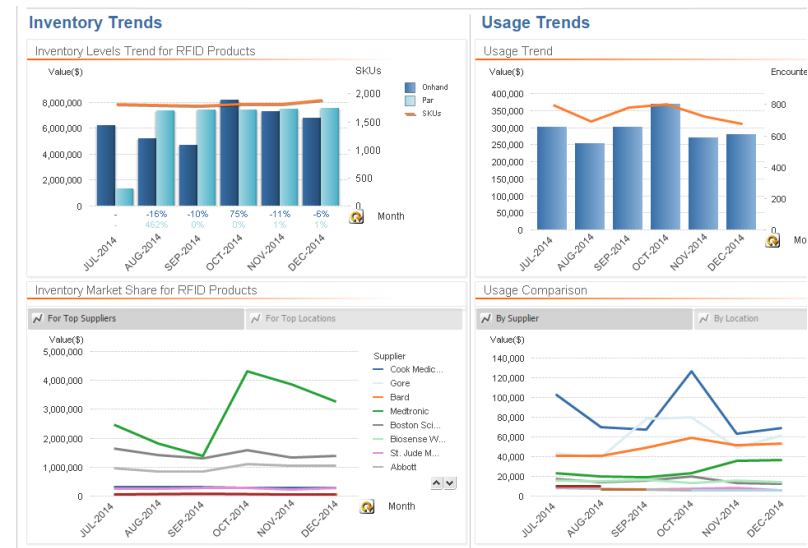
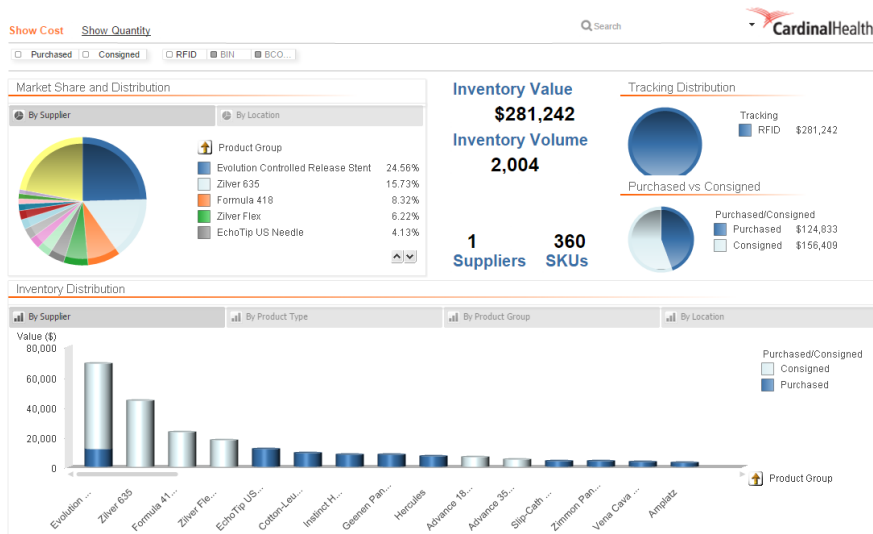
- Excel at the basics and build trust
- Shared vision and values
- Similar level of supply chain maturity
- Ability to commit resources



## Develop a plan

- Gemba walk
- Identify waste and areas of opportunity
- Develop project plan
- Implementation and monitoring

# Building Awareness at Cook Medical



*Demonstrate the superior visibility and controls over current manual methods.*

Complete visibility to products' location, inventory position and utilization system-wide, as well as procedural costs and physician preferences

Identify alternative models for the trunk stock process

Take cost out of the expensive SG&A model for managing inventory

Identify alternative models for the consigned stock process

# Minimal to no Cook products expired through since start (July 2014)

*Cook and BJC's shared visibility enabled improved management of expiration and consignment resulting in reduced waste for both Cook and BJC*



## **Progress West Hospital**

- 0 products expired



## **Barnes Jewish St. Peters Hospital**

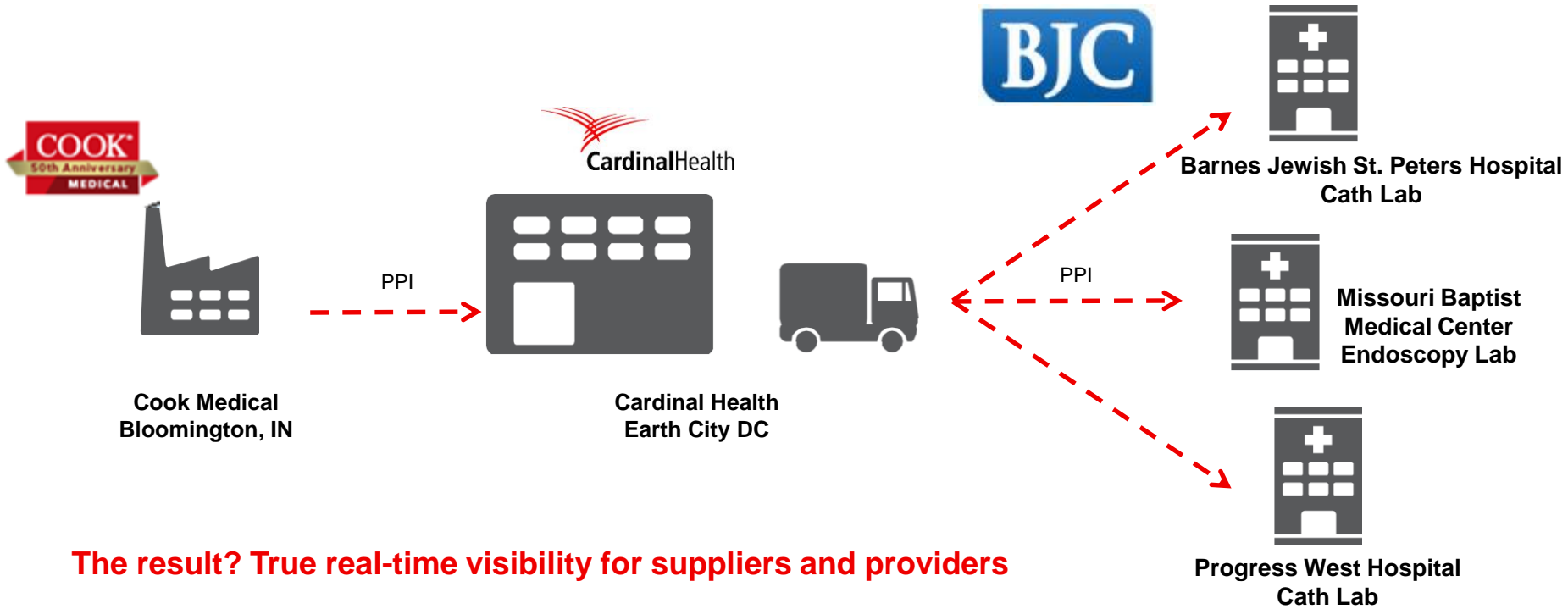
- 0 consigned products expired
- 4 Cook purchased products expired
- There were 3 product transfers from St. Peters to another CIMS pilot hospital



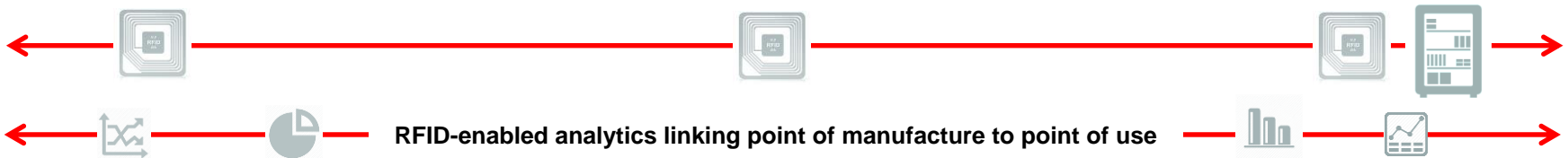
## **Missouri Baptist Medical Center**

- 0 products expired
- Moved 163 consigned products and returned them to Cook. These will be a direct purchase moving forward.

# An end-to end supply chain



**The result? True real-time visibility for suppliers and providers**



# Process installed at BJC



Products get tagged



Store



Use



Replenish/  
analyze/optimize

Complete visibility to products' location, inventory position and utilization system-wide, as well as procedural costs and physician preferences

Increases in charge capture, labor efficiencies and charge capture and clinician satisfaction

Advanced visibility to needed PPI supplies and implants prior to the day of/before procedures

Decreases in inventory safety stocks, obsolescence write-offs and counting

# Driving Results

*Although vastly different in their ordering and stocking practices before the start of the pilot, all sites have adopted standardized practices leading to efficiencies and savings*



## **Progress West Hospital**

- Better cost avoidance at Progress West
- \$5.5K credits found in 1 month



## **Barnes Jewish St. Peters Hospital**

- There were 3 product transfers from St. Peters to another CIMS pilot hospital
- Less clinical time spent on inventory

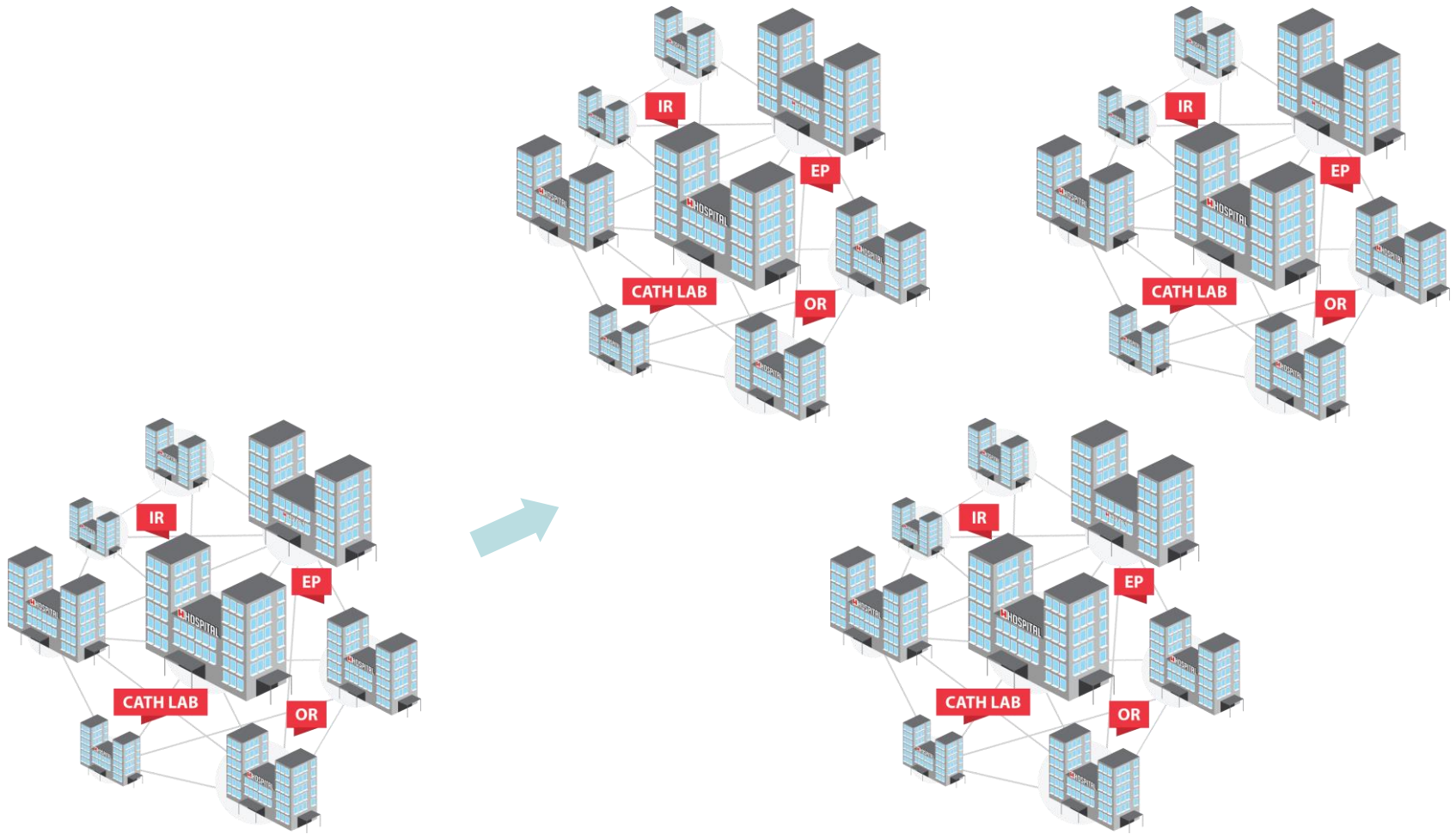


## **Missouri Baptist Medical Center**

- Returned 163 consigned to Cook
- 57% reduction in pars
- Over \$17K in excess consignment returned for credit



# Aggregated visibility – supply chain



# Value creation for all: Win-Win-Win

## Cook Medical

- Reduced packaging cost
- Reduced shipping cost
- Improved sales rep efficiencies
- End-to-end visibility to inventory deployment
- Enhanced Demand Planning
- Reduced consigned stock levels

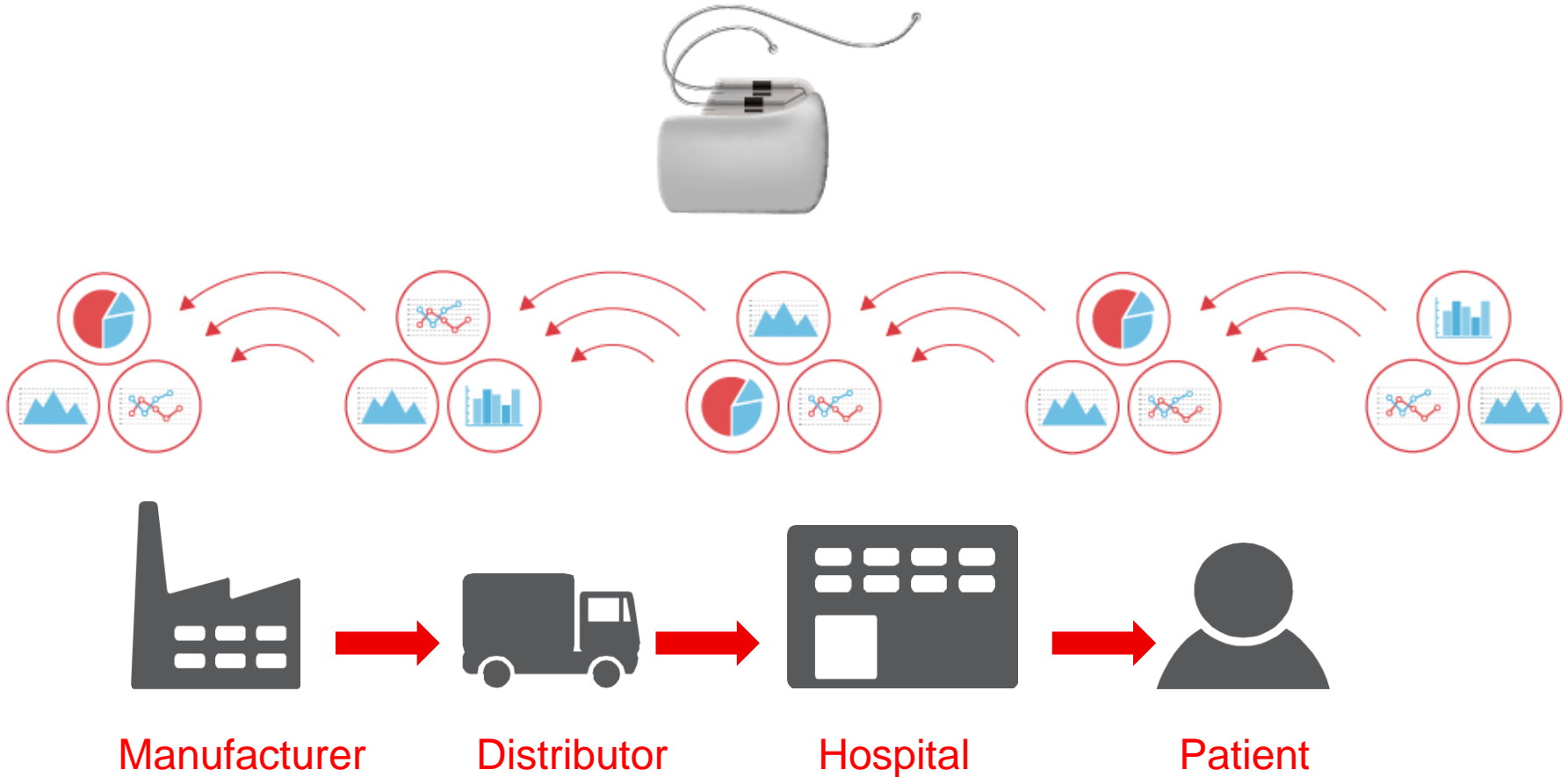
## BJC HealthCare

- Improved inventory management
- Improve clinical satisfaction
- Proactive supply management
- Improve charge capture
- Reduced pricing (bulks)

## Cardinal Health

- Increased volume in Physician Preference Items
- Establish and optimize processes for effective PPI distribution
- Establish and test end-to-end supply chain visibility and analytics

# Let's solve the problem together



# Thank you!

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