

Standardization: Where Nursing Practice Meets Supply Chain

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Learning Objectives

At the end of this session, participants should be able to:

- Discuss why supply chain standardization is beneficial to nursing practice
- Identify best practices in the process of effective collaboration between nursing and supply chain
- Describe how the optimal integration process between supply chain and nursing can impact patient outcomes



SUPPLY CHAIN COMMODITY STANDARDIZATION: THE WHY



Commodity Standardization: Why

HCA Healthcare follows a self-distribution model, providing supplies from 23 centers to all facilities HCA Warehouse Facilities:



CSC Super Centers Equipped to cover additional

CSC services as necessary

CSC Service Centers

- Purchasing
- Accounts Payable
- Regional Warehousing
- Customer Service
- Remote Order Entry (Selective)

CDC Distribution Centers

- Regional Warehousing Only
- **Rx Distribution**





Commodity Standardization

Why bother?

- HCA Healthcare is a self distributed model with 23 warehouses that distribute to facilities:
 - During product shortages or natural disasters, the warehouses frequently share supply resources
- Improve standardization of practice via standardization of product:
 - Improve staff familiarity with supplies
 - Practice patterns can be driven and enhanced through use of standardized products
- HCA Healthcare nurses travel amongst different facilities
- Driving up specific product volumes can sometimes provide savings (Think Big Box store)



Product Standardization: Rationale & Benefits

 Clinical Improved patient safety and outcomes Improved product consistency for nursing practice Reduction in education time Standardized product selection approach for clinical boards and CSG Minimize supply chain functions clinicians are performing 	 Operational Improved continuity during disasters and emergency preparedness Reallocate facility and division resource time currently utilized for commodity product selection National focus to assist during recalls/shortages Ability to mobilize like products during shortages or critical needs Ability to standardize educational materials and launch packages Ability to have disaster stockpiles that contain same products for all facilities Integrate acquisition sites more rapidly utilizing cross reference tools when they are same for every warehouse Free warehouse space to move more non-stock to stock (warehouse stocking strategy) 			
Financial				
Reduction in waste/expired product				
 Ability to optimize pricing/volume tiers during contracting process resulting in savings 	*Additionally, having more items in stock in our warehouses			
 Identification of most cost effective products when all clinical and operational product elements are the same 	reduces the turn around time for availability, lessening the risk of necessary supplies being unavailable.			



Historical Perspective

It all began in 2012...

- 2012: Supply Chain started to develop what it referred to as formularies to standardize products and reduce SKUs in warehouses. This was also a space saving initiative.
- 2015: Having noticed that the formulary process seemed to be viable but likely needed more impact, National Product Formulary was socialized to Clinical Supply Chain and HCA Healthcare's nursing leadership.







What was the process?

How did we prioritize?

- Data, data ,data:
 - Data extracted by contract
 - Item variation analysis
 - Best SKU to standardize to determined based on current utilization
 - Supply Chain and Nursing clinicians evaluated items for appropriateness
 - Final formulary(s) communicated to Divisions and Facilities
- Expecting:
 - Formulary items would replace existing items in our warehouses
 - These are commodity items that should not usually need much discussion
 - Items with some degree of sensitivity were discussed for clinical appropriateness
- Outcomes...



Actual photograph of facility clinicians' responses to commodity standardization...

Remember, clinicians from supply chain with years of nursing experience were evaluating these products





We re-evaluated the process...





What went awry?

2015–2016 National Product Formulary

- We had templates
- We had a process
- We educated the field...
- Sometimes conversions occurred...
- Sometimes the conversion was deemed "Not Clinically Acceptable"
- What was missing from the process?





Now What?

2016-2017-2018

- Informal meetings between Supply Chain and Clinical Operations Group began to occur
- Those developed into more formal gatherings
- Commodity nursing items were brought forth for approval by not only Supply Chain clinicians but also by Clinical Operations Group (COG)
- We developed a method of pulling data by product category, utilizing the categorization tool available at HealthTrust
- Our team developed a method of normalizing the unit of measure to insure we were calculating correctly
- Supply Chain Analytics developed a method of monitoring conversion in the field
- OUTCOMES...



Results

2019-2020

- In 2019 we published 36 product formularies
 - 1,330 SKUs Reduced
 - Hard savings approximately \$7M

- In 2020, during the Pandemic, we still managed to launch 74 initiatives
 - 3,056 SKUs reduced
 - Calculated savings approximately \$23M





SUPPLY CHAIN & NURSING COLLABORATIVE: BUSINESS OPERATING MODEL



Program Framework





Business Operations & Governance Model

2021 Goal: Refine existing HCA Supply Chain & HCA Nursing business operating model and establish process for governance, as well as systems of control

Identified Milestones:

- Approval of business operations & governance model
- Defined phases with sprint work sessions scheduled

Anticipated Work Products:

- Practice Alert(s) As needed
- Clinical Integration Plan(s) As needed
- Approved business operations & governance model
- Defined systems of control, Performance Visibility & Management plan





Pathway Supply & Equipment Management: Proposed Phases & Sprint Cadence



Meeting cadence for all phases: 2-4 hour sprint blocks as needed per Phase; quarterly Phase wrap-up & governance



Review Process





Phase 1 Example: April, May, June 2021

April – Incontinence Supplies & Enteral Feeding	-
 External Urinary Catheter Urology, General Fecal Management System Wipes, Incontinence Adult Incontinence, Mesh Briefs and Liners 	 Underpads and Adult Briefs (Disposable Tubes, Enteral Feeding and Accessories Tubes, NG Enteral Feeding, Neonatal
May – Pediatric-Specific Items	-
 Catheters, IUP Kits, Admission, Maternity, and Personal PICCs, Neonatal Neonatal and Infant Supplies Neonatal Products 	 Neonatal, Urology Products Labor and Delivery Supplies Maternal and Neonatal Supplies Wipes, Infant Baby Skin Care Supplies

June – Skin Care & Patient Wristbands

- Skin Care Products
- Patient ID, Wristbands



Standardized Product Request Form

Collaboration Call-out

Creation of a Standardized Product Request Form

- Established standardized "Product Request Form"
- SBAR format (Situation, Background, Assessment, Recommendation)

Product Issue Form

- For routine requests, Facility leadership will complete this form and submit to the Division CRD. The Division CRD will review with the DCNE for Division approval. If request is not approved, they will route back to Facility requestor. If request is approved, they will submit to the Corporate Standardization Formulary Team for review (through monthly process). - For urgent requests, Facility leadership should call local Supply Chain leadership for review and escalation.

Request Date	MM-DD-YYYY
Facility Name	Facility Name
Requestor Contact Name	First and Last Name
Requestor Contact Phone Number	XXX-XXX-XXXX

	Product(s) to Review:	Product 1	Product 2	Product 3	
uation .	Product Name	Product Name 1	Product Name 2	Product Name 3	
	Product Manufacturer	Product Manufacturer1	Product Manufacturer 2	Product Manufacturer 2	
	Product SIN (Standard Item Number)	SIN 1	SIN 2	SIN 3	
	Part of Kit? (Dropdown)				
	Product Issue Classification (Dropdown)				
Sit	Request Reason (Dropdown)				
	Product Category (Examples: hygiene, IV, surgical, etc)	Category1	Category2	Category3	
	Additional Comments:	Add comments here			
	# Items Used for Last 6 Months				
Ŧ	Total \$ Spend for Last 6 Months				
(groun	Safety Profile: # Near Misses w.in Last Year				
Back	Safety Profile: # Serious Safety Events w.in Last Year				
	Literature Review Completed? (if yes, attach with request form submission)				
	Problem we are trying to solve: Add comments here				
Tent	If we do not adopt this product, what is the result?	Add comments here			
L SS	Benefits		Risks		
Assi	Add benefit		Add risk		
-	Add benefit		Add risk		
	Add benefit		Add risk		
	Add benefit		Add risk		
	Note: Corporate Nursing/Supply Chain Le	eadership will complete this section	on for communication/response		
5	Review Date XX-XX-XXXX				
	Review Status (Dropdown)				
rendati	If Approved, direction is to work with local supply chain resources to determine implementation timeline for Division/Facility				
E E	If Not Approved, document reason here:				
8	Enter reason not approved and next steps for Division/Facility to take				





IMPACT TO CARE DELIVERY



Supply Chain & Nursing Collaboration: HAI Reduction

Scenario/Example 1:

CAUTI Prevention – Resolution of Real-time Surveillance Findings

While rounding at multiple facilities, the HCA nursing Care Delivery team discovered the opportunity to reduce variation in CAUTI-related practice and product:

- 1. Urinary catheter tubing was longer than expected, causing dependent loops and urinary stasis. Extended length urinary catheters are intended for surgical settings, not inpatient.
- 2. Surveillance identified an opportunity to collaborate with Supply Chain and Infection Prevention partners to ensure the correct urinary catheter kits are stocked in the intended care areas.





Supply Chain & Nursing Collaboration: HAI Prevention

Scenario/Example 2:

Bladder Management Program

The HCA Bladder Management Program (BMP) is a practice-driven protocol to support reduction in the number of indwelling urinary catheters (IUC).

- The BMP algorithm offers decision support and IUC alternatives such as external devices (male or female), intermittent straight catheterization options, and independent voiding when an indwelling catheter is ordered.
- The algorithm was developed by a multidisciplinary team with input from frontline staff.

Bladder Management Algorithm



Supply Chain & Nursing Collaboration: Activity Care

Scenario/Example 2:

Patient Activity Care Equipment Standardization

The HCA nursing Care Delivery team collaborated with Supply Chain to create an enterprise-wide, standardized equipment list that supports safe patient mobility:

- Ambulation assist devices
- Transfer assist devices
- Positioning assistance
- Ambulation assistance



Ambulation Assist

Device	Link	Vendor of choice	Capital purchase	Other
Gait Belts	Gait Belts- Deroyal	Deroyal	no	On formulary Check with supply chain
Sit to stand and transfer aid	EZTurn Device		yes	
Pivot/stand/turn device	Sara Steady	Arjo	yes	
Walking sling lift		Arjo	Yes	
Ambulation assistance	IVEA Mobility Assist		yes	
Crutches		Medline	no	Standard Bariatric
Walkers-standard		Medline	no	Standard Bariatric
Walkers with holders	EVAsupportwalkerswithholders	Kerma	no	Standard Bariatric
Canes		Medline	no	Standard Bariatric
Commode chairs		Medline	no	Standard Bariatric
Commode liners	CLEANIS	Cleanis	no	



Supply Chain & Nursing Collaboration: Activity Care

Scenario/Example 2: Patient Activity Care Equipment Standardization



Call to Action: Teamwork!

- Action steps of Supply Chain & Nursing Collaborative:
 - Identify current state of enterprise-wide equipment
 - Availability & condition
 - Partner with vendors to assess products for usability and alignment to nursing workflow
 - Perform gap assessment regarding current state activityrelated equipment with each facility CNO
 - Present Medical-Surgical & Critical Care Nursing Advisory Groups with activity care equipment options to select standardized activity care equipment that aligns with nursing workflow
 - Supply Chain & Nursing Collaborative supported by:
 Equipment Standardization in Activity Care Playbook



Supply Chain & Nursing Collaboration: Activity Care

The Impact of Cross-Functional Collaboration



Outcome: Prevention of patient functional decline, preservation of mobility





IMPACT TO NATIONAL PRODUCT FORMULARY



National Product Formulary

Hygiene Care Standardization

Improved Care Delivery = Cost Savings

Category	Go Live Date	Compliance Measurement Start Date	Current Compliance	Vendor From-To	SKU From-To	Estimated Annual Savings
Body Wash and Lotion	Aug 23 rd	Oct 23 rd		8 to 3	22 to 5	(\$157,946)
Barrier Products and Incontinence Wipes	Sept 5 th	Nov 5 th		5 to 4	23 to 7	\$964,880
Personal Hygiene	Aug 23 rd	Oct 23 rd		4 to 1	16 to 4	\$8,470
<u>Oral Hygiene</u>	Sept 5 th	Nov 5 th		8 to 2	37 to 14	(\$74,507)
Skin Prep	Sept 12 th	Nov 12 th		8 to 3	55 to 21	\$116, 183
Lab Coats & Jackets	Sept 19 th	Nov 19 th		7 to 1	100 to 28	\$124,191
Impermeable Moisture Barriers	Sept 26 th	Nov 26 th		2 to 1	11 to 3	\$72
Instant Hot & Cold packs	Sept 26 th	Nov 26 th		4 to 1	27 to 5	\$116,818
Exam Table Paper	Sept 26 th	Nov 26 th		2 to 1	15 to 5	\$6,887
Total Impact				93 to 30	585 to 195	\$2,285,331

Standardized Hygiene Care Products:

- Promote evidence-based practice
- Ensures all standardized products are CHG-compatible
- Promotes pressure injury prevention tactics
- Allows for patient-centric care while reducing waste



SUMMARY & NEXT STEPS



Lessons Learned

- While product standardization does have financial benefit, the benefits to clinical operations, specifically clinical processes and outcomes, cannot be overstated.
- Reducing variance in product will reduce variance in practice and support driving of key clinical initiatives (such as CAUTI reduction and activity care).
- Partnership and alignment to an agreed upon business operating model increases efficiency and end-user satisfaction. This also creates a forum for change management.
- Standardization of product is a core component of Care Delivery.
- Next steps:
 - Refine work products, including clinical and operational guidance
 - Complete sprint cycles
 - 2022 strategic planning alignment



Thank you



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