

# National Trends in Human Milk & Infant Formula Management

## 2026 Operational Insights & Safety Implications for Hospital Leaders



**Based on the MilkTracker National Trends  
Report by AngelEye Health (Jan. 2026)**

Authors: Jakayla Maher, BSN, RN;  
Carrie Petras, RD, CSPCC;  
Jaylee Hilliard, MSN, RN, NEA-BC, CPXP

**AngelEye**  
HEALTH

# Introduction

A review of clinical assessments conducted across 50+ U.S. hospitals in 2025 uncovered that across U.S. neonatal and pediatric environments, infant and pediatric feeding workflows are rapidly evolving from visually dependent, paper-based processes to standardized, technology-enabled systems. The study found consistent, high-impact patterns across the full feeding management cycle (receipt, storage, preparation, administration, transport, and discharge), spanning small community/special care nurseries through large regional neonatal centers, and including both centralized and mixed/decentralized preparation models.

Multi-site patterns emerged, including growing adoption of barcode safeguards for human milk, traceability blind spots for formula and additives, a shift toward centralized preparation and precision measurement, and heightened attention to discharge reconciliation and recall readiness. These themes apply across NICUs, mother–baby units, and pediatric acute and critical care settings, with adaptations tailored to each unit’s specific needs and local layout, staffing, and preparation model.

Leaders are increasingly approaching feeding processes with the same rigor as medication workflows, acknowledging their cross-departmental nature and the number of critical handoffs involved.

This eBook gives a high-level overview of what we learned. You can dig deeper with webinars and a White Paper by visiting [AngelyeHealth.com/MilkTrackerTrends](https://www.angelyehealth.com/MilkTrackerTrends)





# The Landscape Shift:

## FEEDING MANAGEMENT AS A HIGH-RELIABILITY SYSTEM

Infant and pediatric feeding workflows are rapidly evolving from visually dependent, paper-based processes to standardized, technology-enabled systems.

Leaders are now approaching feeding with the same rigor as medication workflows, acknowledging the cross-departmental nature of the risk.

**PAPER-BASED**  
(Visually Dependent)



**TECHNOLOGY-ENABLED**  
(Standardized)



**HIGH-RELIABILITY SYSTEM**  
(Cross-Departmental Risk)



# Trends for Leaders

- 1. CLOSE THE SAFETY GAP:** Applying equal rigor to human milk and formula.
- 2. LOT-LEVEL TRACEABILITY:** Ensuring recall readiness and rapid patient identification.
- 3. PRECISION NUTRITION:** Moving from scoops/teaspoons to gram-scale accuracy.
- 4. CENTRALIZED PREPARATION:** Creating purpose-built environments with clear role ownership.
- 5. DATA-DRIVEN RELIABILITY:** Tracking near-miss interceptions, not just compliance.
- 6. ENTERPRISE STANDARDIZATION:** Aligning minimum safety standards beyond the NICU (PICU, Peds).



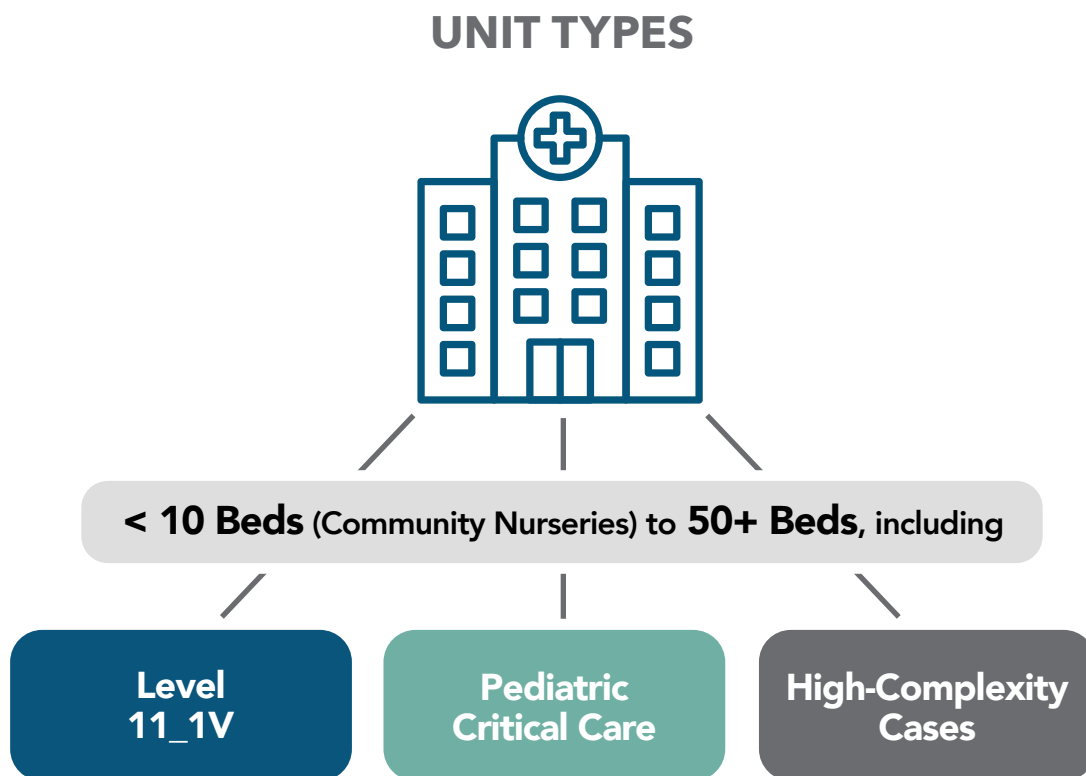


**KEY  
INSIGHTS:**

**High-reliability practices** were observed in both small community nurseries and large academic centers. Reliability is achievable in any setting when ownership and workflows are explicitly designed.

## Practice-Based Evidence: **EXCELLENCE IS NOT SIZED-DEPENDENT**

Synthesized from de-identified clinic assessments and gap analyses of over 50 hospital neonatal and pediatric units across the country.



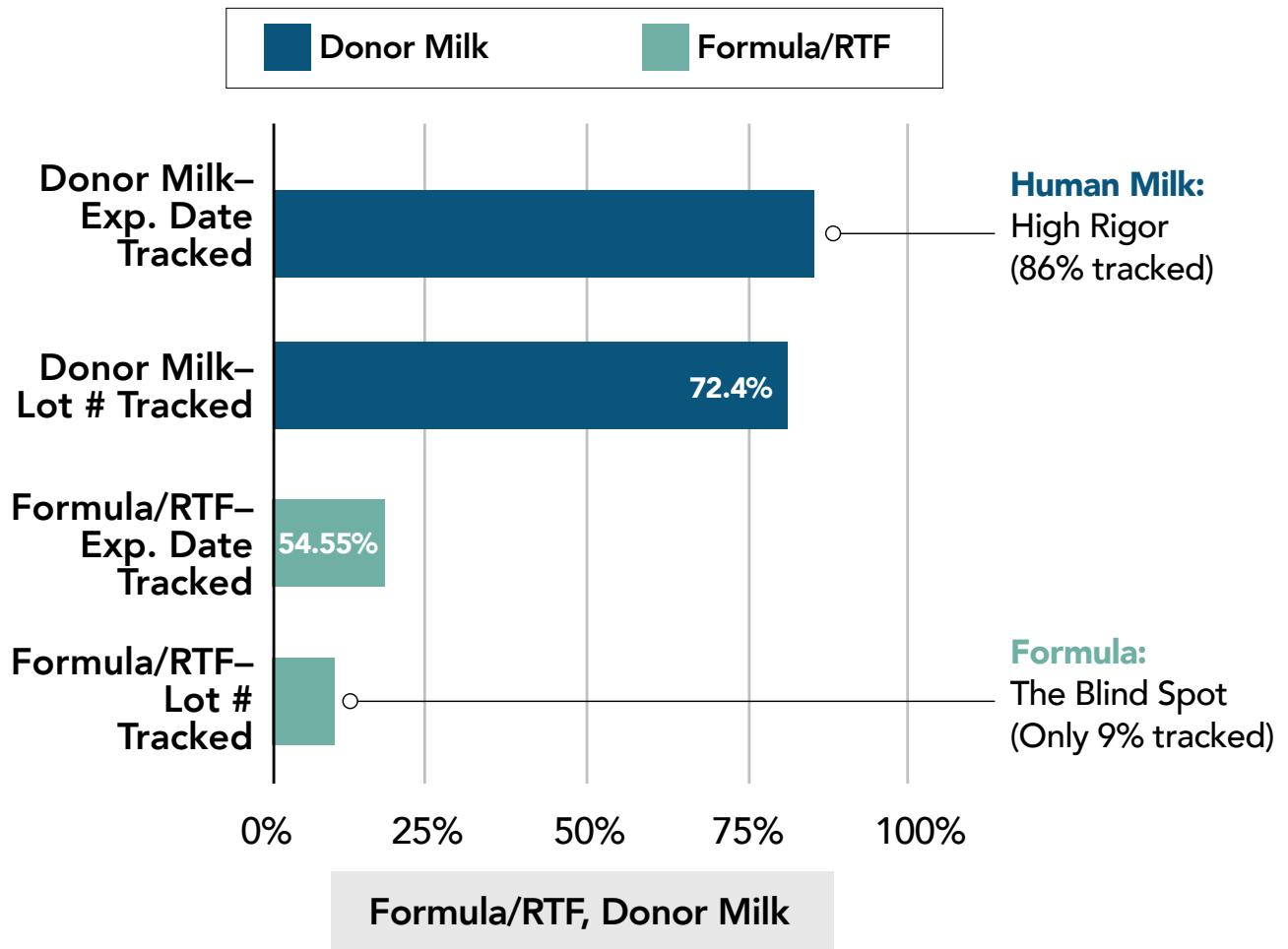


**LEADERSHIP TAKEAWAYS:**

Establish minimum verification standards across **ALL** product types.

## The Central Conflict: THE 'TWO-TIERED' SAFETY GAP

Lot and Expiration Tracking by Product Type



### The Risks

- **Traceability Blind Spots:** Unable to identify which infant consumed a recalled lot.
- **Verification Equity:** Formula relies on visual checks; Milk gets multi-step verification.



# NATIONAL TREND 1



## LEADERSHIP TAKEAWAYS:

**Traceability** must start at the door. If identity isn't established here, downstream steps rely on manual fixes.

## Collection & Receipt: THE FIRST LINE OF DEFENSE

### Common Gaps

- Inconsistent scanning of home milk.
- Handwritten labels = transcription risk.
- Ignoring formula lot/expiration entry.



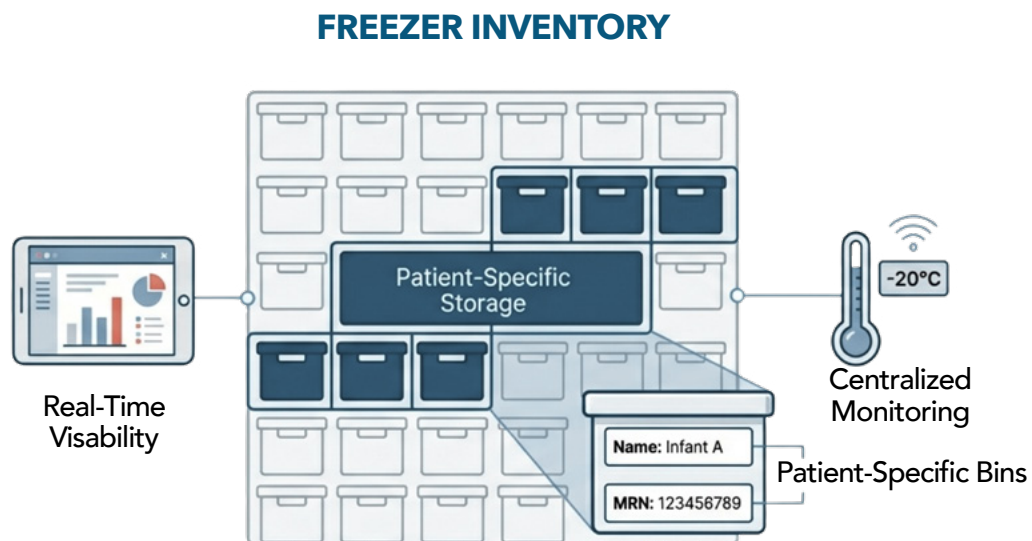
### Leading Practice

- Barcoded Intake: Labels applied immediately upon arrival.
- Defined Roles: Unit clerks or milk techs trained for intake.
- Traceability: Capturing lot/expiration before shelving.



# NATIONAL TREND 2

## Storage & Inventory: VIRTUALIZING THE FREEZER



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### The Problem:

"Blind" freezers lead to waste and panic.

### Common Gaps:

Manual logs, physical counts, lost bottles.

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### The Fix:

Virtual inventory to reduce cognitive load and "hunting" for milk.

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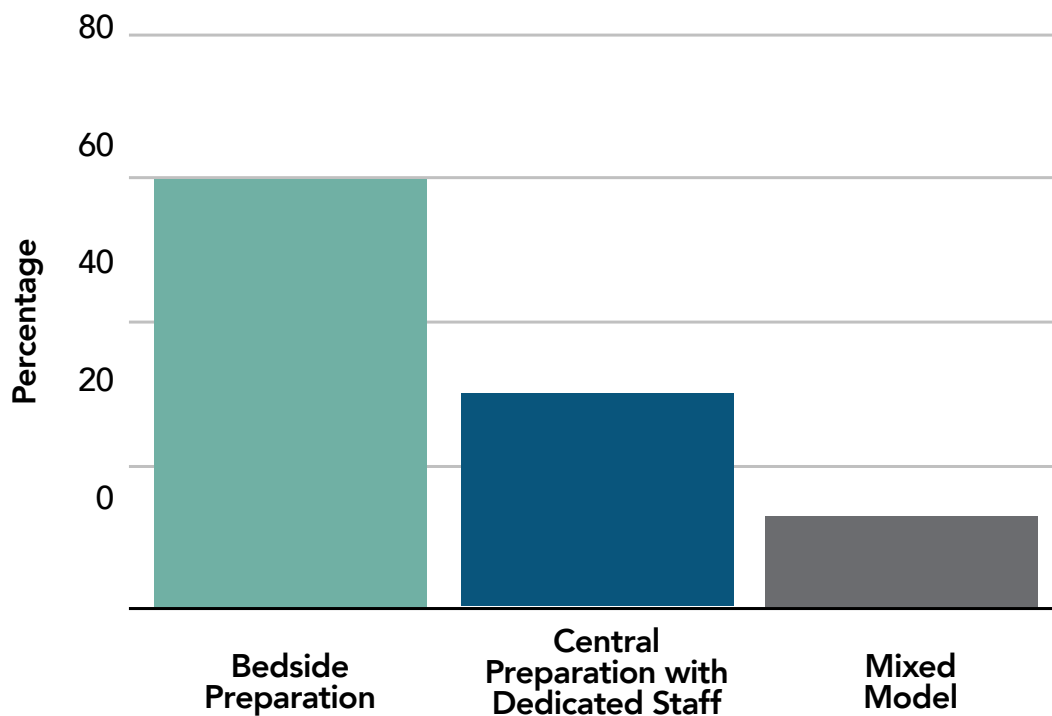
# NATIONAL TREND 3



**ENVIRONMENTAL CONTROL:** Zoning "Clean vs. Dirty" to prevent cross-contamination.

## Preparation: FROM KITCHEN LOGIC TO CLINICAL PRECISION

### Preparation Model Distribution by Percentage



### The Precision Gap

<b>Old Way</b>	Household scoops, teaspoons, visual estimation	<b>Risk:</b> Caloric variability
<b>New Way</b>	Gram-scale measurement (0.1g accuracy)	<b>Benefit:</b> Clinical precision

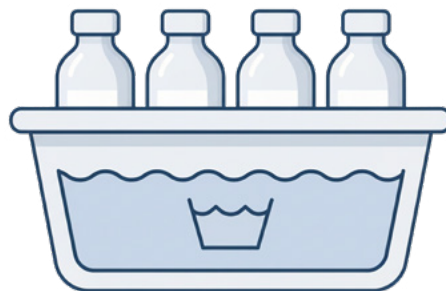
# Operational Deep Dive:

## WARMING RISKS & BATCHING WINDOWS

### RISK 1

#### WARMING EQUIPMENT

#### SHARED RISK

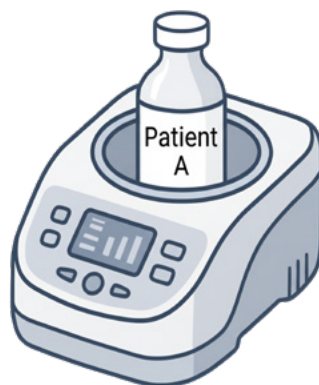


#### PROBLEM

Unassigned liners = wrong bottle risk

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#### PATIENT-DEDICATED



#### FIX

Patient-dedicated waterless warmers

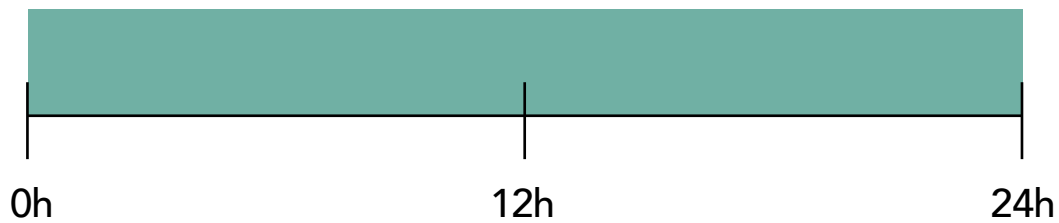


**LEADERSHIP TAKEAWAYS:** **Standardize** preparation windows based on human milk handling limits, staffing model, and waste reduction goals.

## RISK 2 PREPARATION WINDOWS

### 24-HOUR BATCHING

Centralized labs batch 24h for efficiency.



### 12-HOUR BATCHING

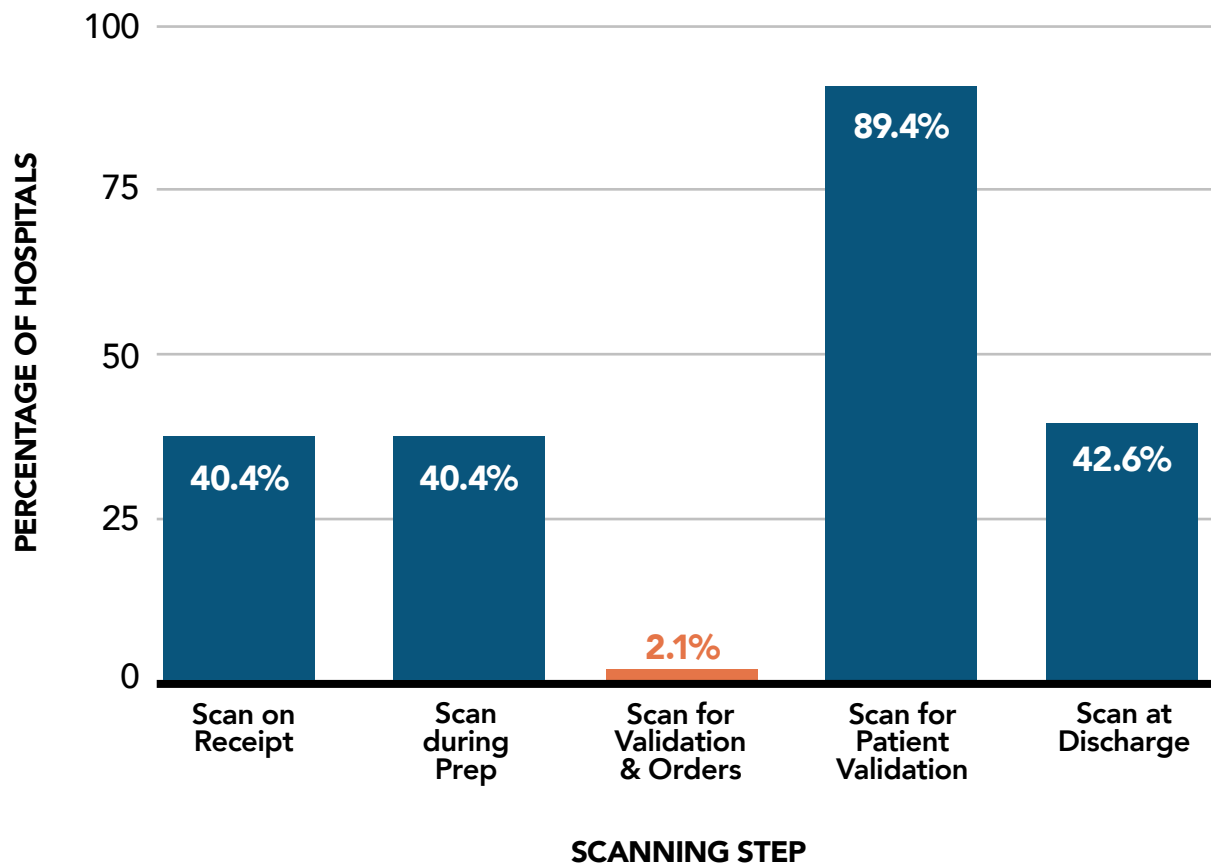
12h windows can decrease waste when orders are updated daily.



# NATIONAL TREND 4

## Administration: THE FINAL SAFETY GATE

### Percentage of Hospitals Scanning at Each Process Step



#### The Gap:

Reliance on manual “Two-Person Checks” vs. Point-of-Care Barcoding.

#### Why It Matters:

Technology minimizes dependence on memory and visual similarity (look-alike bottles).

# NATIONAL TREND 5

Discharge & Transport:  
**PREVENTING LOSS  
AND CLOSING THE LOOP**

## The "Scan-Out" Workflow



**1. VERIFY INVENTORY**



**2. SCAN-OUT  
RECONCILIATION**



**3. PARENT HANDOFF**



**4. RECALL READINESS**

**NOTHING LEAVES  
WITHOUT A SCAN**



# Pediatrics & Critical Care:

## **SIMILAR STAKES, DIFFERENT FAILURE MODES**

### **THE CHALLENGE: DECENTRALIZATION**

- PICU/Peds often uses kitchens, nourishment rooms, or bedside mixing.
- Risk: Variation in lot capture and expiration dating.

### **THE STRATEGY: ENTERPRISE STANDARDIZATION**

- Define minimum safety standards (scanning, lot capture) regardless of unit.
- Adapt hardware placement to layout (private rooms vs. pods).
- Assign ownership for nourishment rooms.



# NATIONAL TREND 6



## LEADERSHIP TAKEAWAYS:

Use **data** to drive reliability and Q1 trend verification compliance by stage, unit, and shift.

## Analytics:

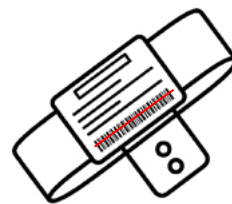
### FROM 'DID WE SCAN?' TO 'WHAT DID WE LEARN?'

Moving from compliance audits to near-miss intelligence. In a recent 30-day sample across five de-identified hospitals, MilkTracker supported 100,037 scans and intercepted 549 near misses (bold the numbers) in the categories shown. The most common was expired milk bottles and patient MRN mismatches.



**298** expired  
milk bottles  
intercepted

**243** patient MRN  
mismatches  
caught



**8** expired product  
scans prevented

# EMERGING TRENDS

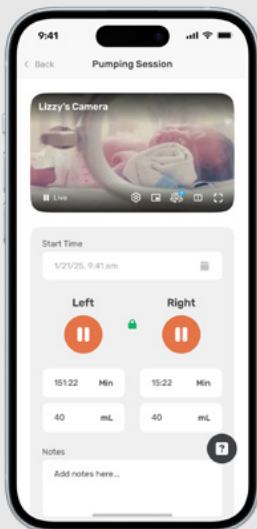
## Family Partnership & Antenatal Inventory

### ANTENATAL PUMPING



- **CHALLENGE:** Families arriving with colostrum before admission.
- **SOLUTION:** "Pre-patient" storage protocols and bridging labels.

### FAMILY INTEGRATED CARE (FiCare)



- **TRANSPARENCY:** Parents track inventory via app.
- **PARTICIPATION:** Self-service labeling with guardrails.
- **IMPACT:** Reduces anxiety, builds trust.






# Case Study:




## CLOSING THE SAFETY GAP

### LARGE ACADEMIC MEDICAL CENTER (Level III/IV NICU + Peds)

#### Before: THE VULNERABILITIES

-  **Traceability Gap:** Formula lots not tracked.
-  **Recall Response:** 4+ hours via chart review.
-  **Discharge:** Milk left behind/lost.

#### After: THE TRANSFORMATION

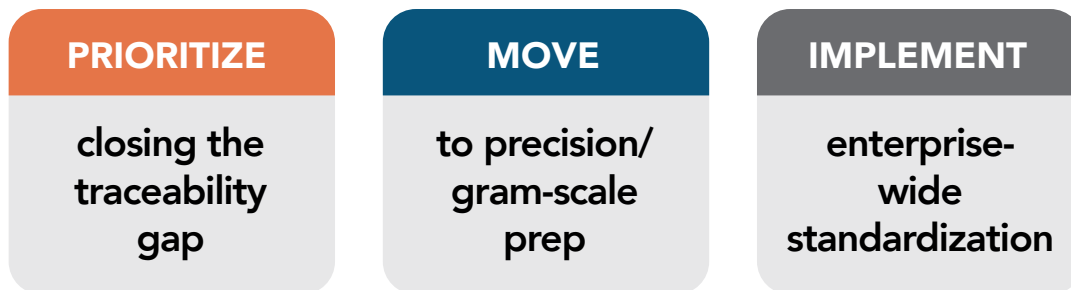
-  **Universal Scanning:** All fluids (HM+Formula) scanned.
-  **Recall Response:** <5 Minutes
-  **Forced Scan-Out:** Minimized waste and abandonment.

## Conclusion:

### **SAFE PASSAGE AND DEFENSIBLE PRACTICE**

Standardization reduces preventable risk. Size doesn't matter; process does.

### Strategic Call to Action



### NEXT STEPS:



**SCHEDULE A 30-MINUTE CALL**  
to review the 90-Day Implementation Guide  
and Readiness Playbook.

