



National Infusion Collaborative Clinical Meeting

Fall Clinical Meeting
September 23, 2026

Meeting Logistics and Introductions



Kristen Hughes, PharmD, BCPS, CPPS

St. Jude Children's Research Hospital
Sr. Clinical Pharmacy Specialist, Medication Use
Safety



Sam Bowker, PharmD, MHIIM

St. Jude Children's Research Hospital
Senior Clinical Applications Analyst, Pharmacist

Navigating Zoom

Q&A Box: For any questions or comments throughout the presentation

Post-Meeting Survey: Following today's meeting, please let us know how we can improve going forward

National Infusion Collaborative Infusion Trends

Joanne Hatfield, PharmD, BCPS

Director of Clinical Solutions
Bainbridge Health

The Drug Library Build Process for Investigational Medications

Kristen Hughes, PharmD, BCPS, CPPS

Sr. Clinical Pharmacy Specialist, Medication Use Safety
St. Jude Children's Research Hospital

Sam Bowker, PharmD, MHIIM

Senior Clinical Applications Analyst - Pharmacist
St. Jude Children's Research Hospital

National Infusion Collaborative Member Survey Results

Joanne Hatfield, PharmD, BCPS

Director of Clinical Solutions
Bainbridge Health

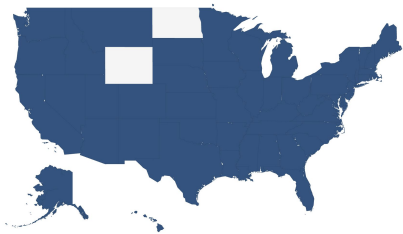
Q&A

National Infusion Collaborative



National Infusion Collaborative

6/1/26 - 8/31/26



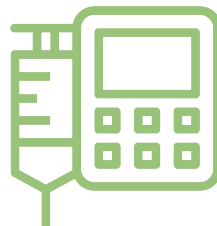
>900

Hospitals



>100,000

Infusion Pumps



>22 million

Infusion Records



> 1 million

Alerts

National Infusion Collaborative

Key Performance Indicators



6/1/26 – 8/31/26

DERS Compliance

Alert Rate

Override Rate

Pediatric Network

90.0%

8.7%

66%

Adult Network

91.1%

5.3%

68%

Interoperability Network

91.5%

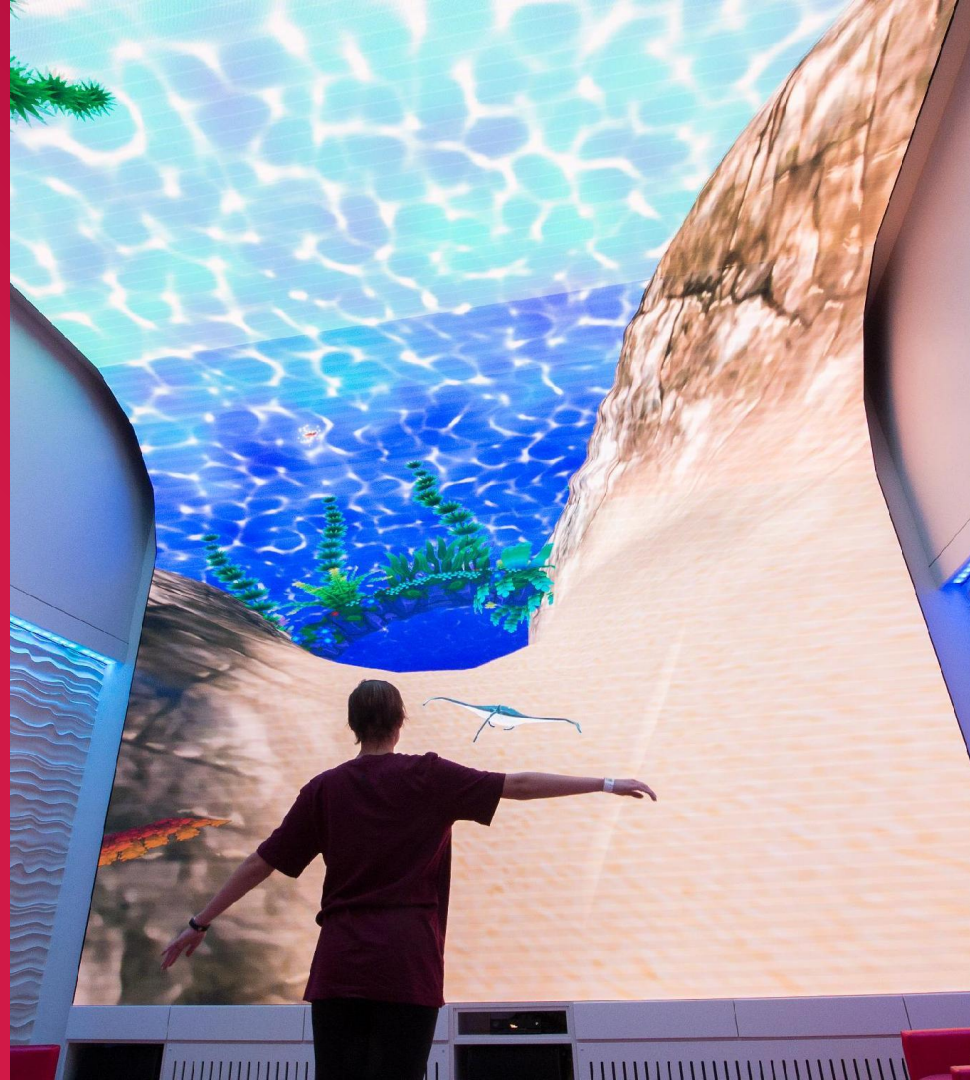
4.9%

71%



The Drug Library Build Process for Investigational Medications

Sam Bowker, PharmD and Kristen Hughes, PharmD and
St. Jude Children's Research Hospital
Memphis, TN



St. Jude Children's Research Hospital



Pediatric Academic Research Hospital



Memphis, TN



73 inpatient Beds

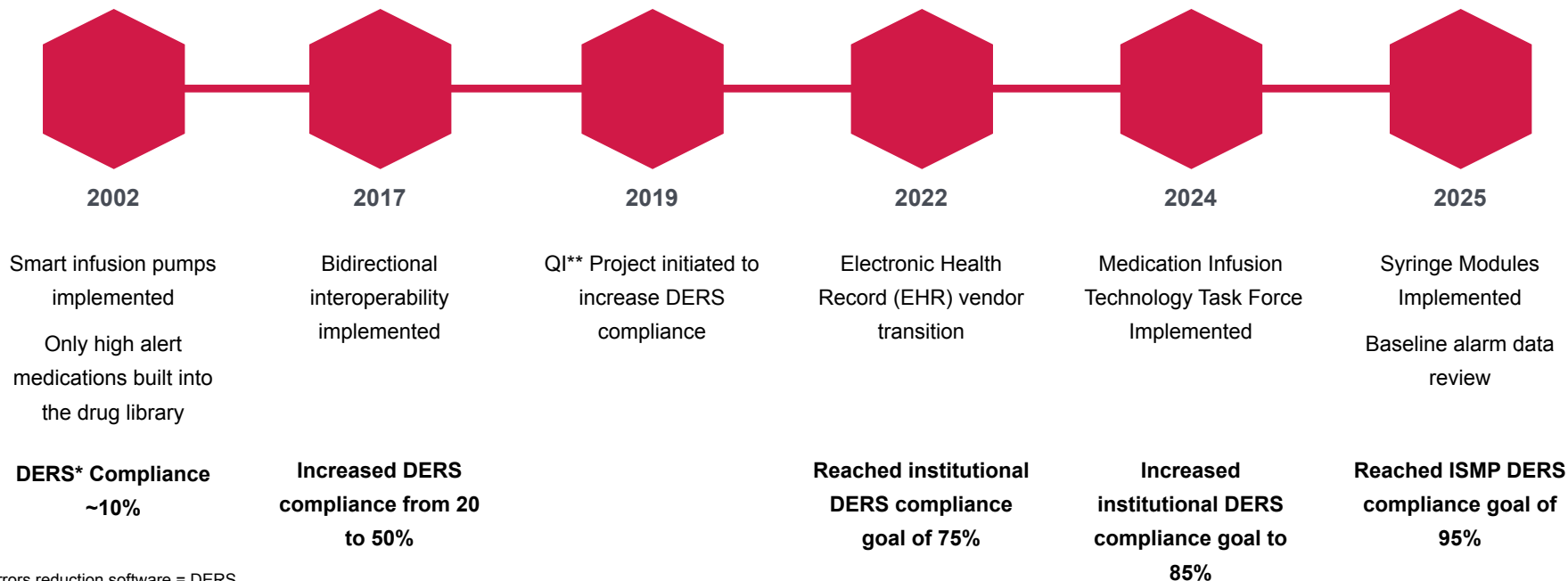


264,000 outpatient visits per year



Focused clinical scope – Catastrophic childhood illness

Interoperability: A Journey, Not a Checkbox



*Dose errors reduction software = DERS

**Quality improvement = QI

Investigational Pharmacy Services

- The investigational pharmacy services (IPS) team manages all of our protocols and investigational agents



~200 clinical
research
protocols



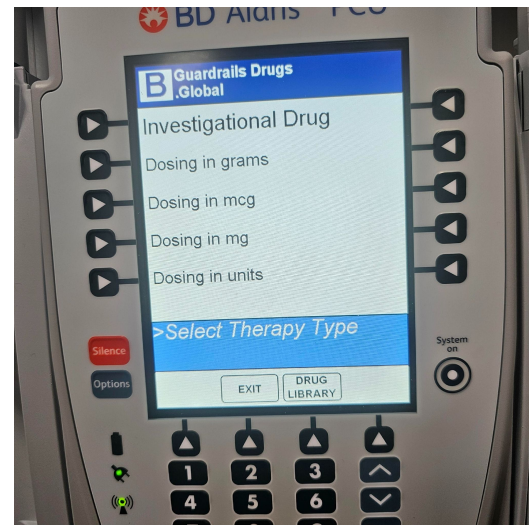
~450 unique
investigational
agents

Endless New Investigational Drugs

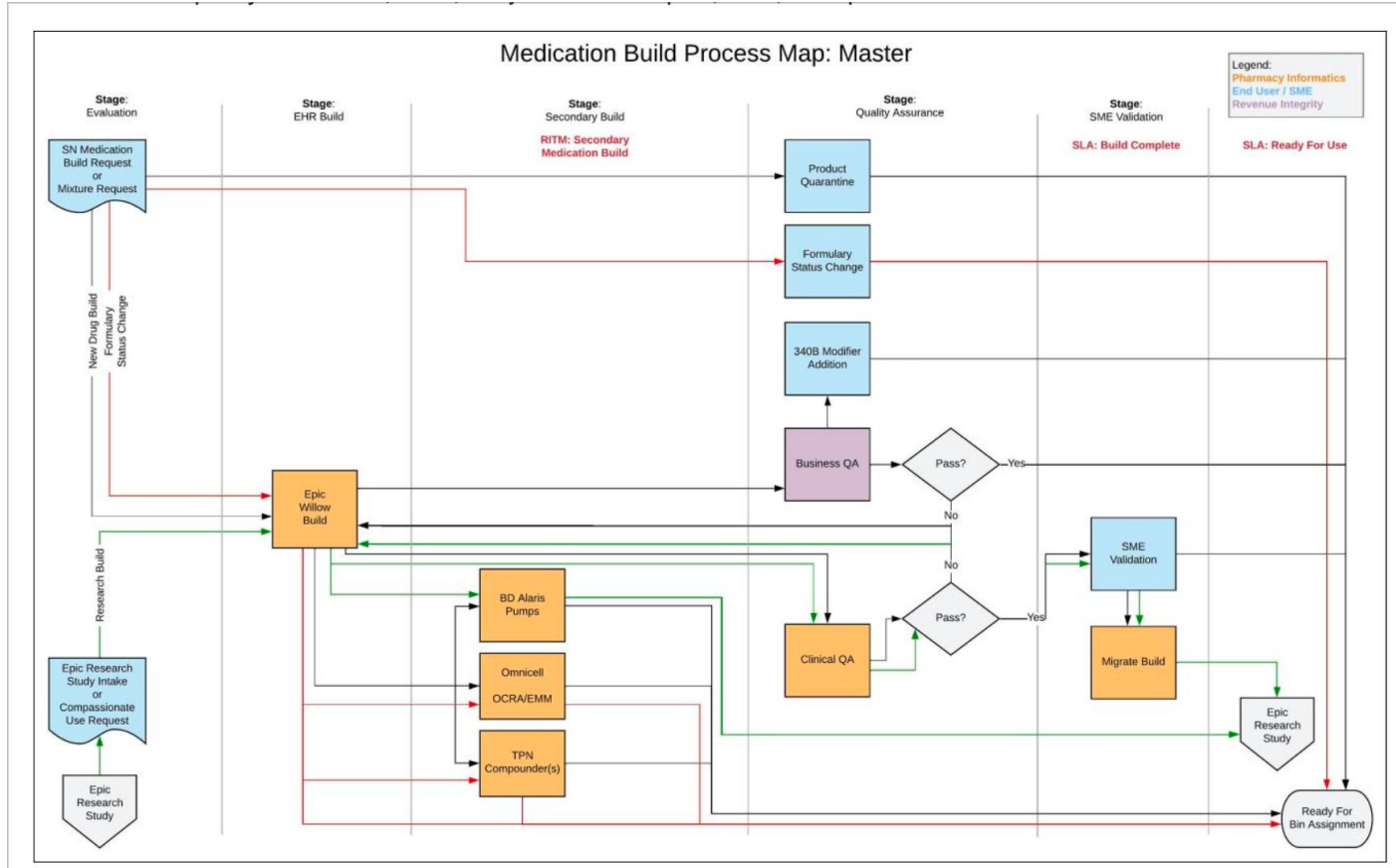
- Drug library updates are made quarterly to add new medications, remove unneeded ones, or to modify Guardrails parameters
 - Updates are limited to this frequency to minimize the number of libraries across our pump fleet
- Unfortunately, new investigational drug builds occur far more frequently than every 3 months
 - How will you navigate new medications that are built in between drug library updates?

Drug	Concentration	Used As	Aliases
Nonformulary Drug		Intermittent	
	--- mcg / --- mL		NFDRUG
	--- mg / --- mL		NFDRUG
	--- gram / --- mL		NFDRUG
	--- unit / --- mL		NFDRUG

Drug	Concentration	Used As	Aliases
Investigational Drug		Intermittent	
	--- mcg / --- mL		INVDRUG
	--- mg / --- mL		INVDRUG
	--- gram / --- mL		INVDRUG
	--- unit / --- mL		INVDRUG



Medication Build Process



Initial Intake Form

Required Information	
Protocol Mnemonic XTEND3004	* Drug Name ⓘ CSL222
Strength / Concentration 1 x 10 ¹³ gc/mL	Dosing Units mL/kg; mL
Bottle / Vial size 1 x 10 ¹⁴ gc (extractable volume of not less than 10 mL)	Dual Sign needed? Yes
Formulation Injectable solution	Dosing Table to Link? No
Manufacturer/supplier CSL Behring LLC	
Hazardous BS2	
Route(s) IV	Will the medication use the Alaris Pump? Yes
OVERFILL needed? No	Maximum Dose limit
Minimum Duration limit (hh:mm): 1 hour	Maximum Duration limit (hh:mm): 1 hour
Storage 2-8oC Refrigerated (DO NOT FREEZE)	Stability data/BUD Infuse the diluted product within 24 hours after the dose preparation.
Prep Instructions	Comments

Secondary System Build Task

- Secondary systems task is generated for review by initial build intake form
- Initial data input done by Willow builder during medication build process
- Task serves as vital second check for
 - Correct alias and library entry
 - Dosing units
 - Ensuring library entry is created (if needed)

☐ Infusion Pump Code

* Infusion Pump Code ?

INVDRUG

Master List Added To:

Drugs

Type of Infusion:

Intermittent

Medication added to Guardrails library with appropriate limits:

☐ Global - Continuous/Bolus

☒ Global - Intermittent

☐ Global - Fluids

☐ Epidural - Continuous/Bolus

☐ Epidural - Intermittent

☐ Epidural - Fluids

☒ Configured all dosing units for each library

* ☒ This medication has been configured in the Alaris Database ?

From Protocol to Pump: Building Investigational Drug Libraries

Where This Work Lives

Pharmacy and Therapeutics Committee

```
graph TD; PTC[Pharmacy and Therapeutics Committee] --- MUSE[Medication Use Safety Team]; PTC --- AUC[Antimicrobial Utilization Improvement Committee]; PTC --- PCOC[Pharmacogenomics Oversight Committee]; PTC --- HCMC[High-Cost Medications Committee]; PTC --- MISC[Metabolic Infusion Support Services Committee]; PCOC --- MITC[OUR COMMITTEE  
Medication Infusion Technology (MIT) Committee]
```

Medication Use Safety
Team

Antimicrobial Utilization
Improvement Committee

Pharmacogenomics
Oversight Committee

High-Cost Medications
Committee

Metabolic Infusion
Support Services
Committee

OUR COMMITTEE

Medication Infusion Technology (MIT) Committee

Committee Purpose and Membership

PURPOSE

Collaborative oversight to enhance the safe use of medication infusion pumps through standardization, education, and continuous quality improvement at St. Jude.

GOAL

Safe, effective, standardized use of infusion pumps across the organization — reducing medication errors and improving patient outcomes.

MEMBERSHIP

Pharmacy

- Clinical Pharmacy Specialist, Sr. Medication Safety (Co-Chair)
- Willow (Pharmacy) Analyst
- Clinical Staff Pharmacists — inpatient and home infusion
- Pharmacy Automation Technician(s)

Nursing

- Director, Inpatient Nursing (Co-Chair)
- Clinical Nurse Specialist(s)
- Nursing Informatics
- Inpatient Nurse(s)
- Outpatient Nurse(s)
- Surgical Services Nurse(s)

Anesthesia and Biomedical Engineering

Anesthesia

- Certified Registered Nurse Anesthetist(s)

Biomedical Engineering

- Manager, Biomedical Engineering

What the Committee Does

01

Best Practices

Establish and review best practices for acquisition, maintenance, and use of infusion pumps at St. Jude.

02

Infusion Data Review

Review and analyze infusion data and drug libraries for all pumps to identify improvements in infusion management systems, including alerts and alarms.

03

Event Reports

Review medication event reports and tickets related to infusion pumps to determine:

- Whether further action can prevent similar errors
- Whether events represent a trend requiring further study
- Biomedical Engineering Quality Report

04

Literature and Regulatory

Review pertinent literature on infusion pumps:

- Institute for Safe Medication Practices (ISMP) risk assessments
- Regulatory requirements
- FDA recalls
- Manufacturer recalls
- Other published literature

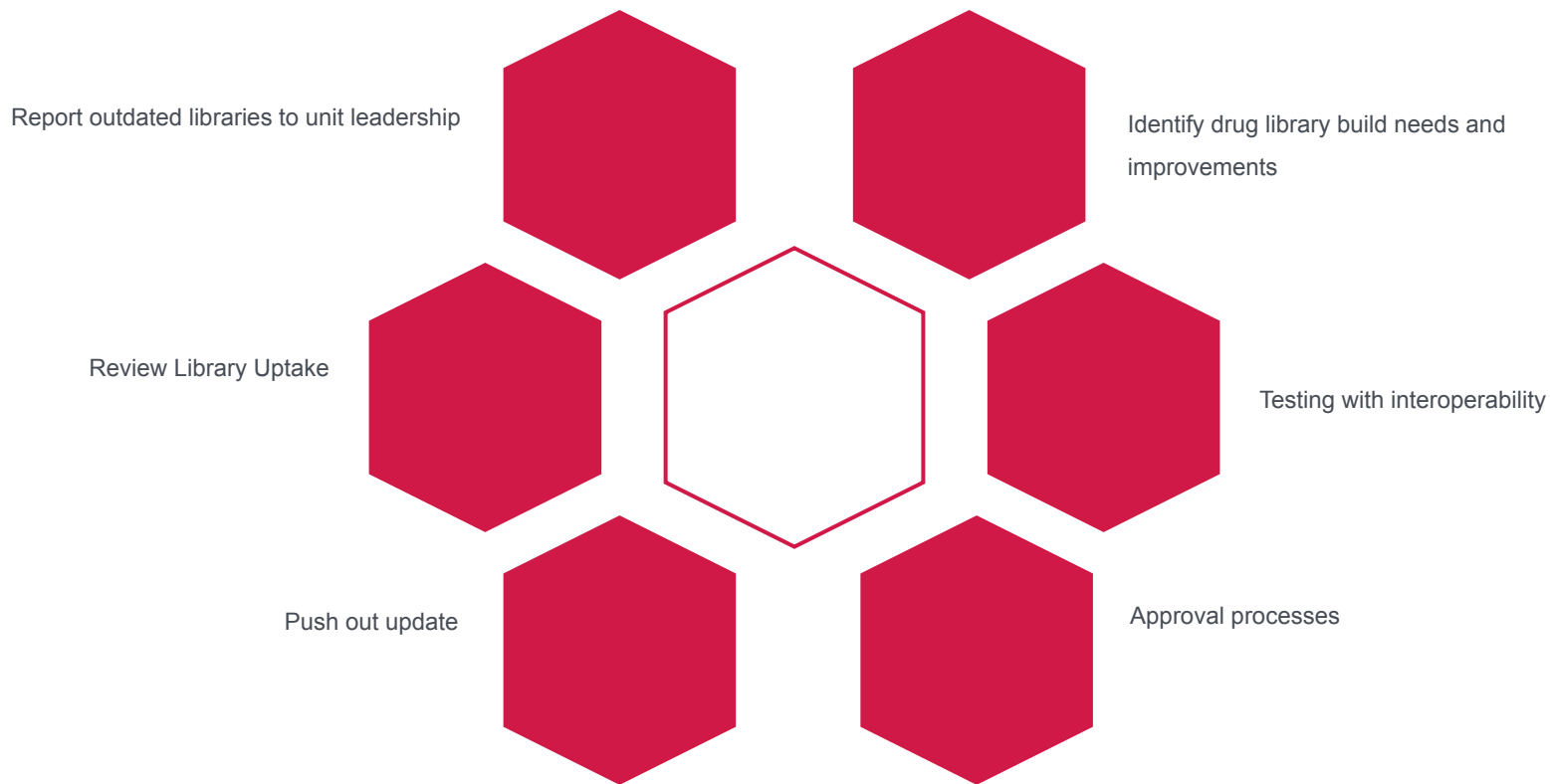
05

Emerging Initiatives

Discuss other infusion-pump-related initiatives, as necessary.

- Workflow challenges and changes
- New technology
- Implementations

Drug Library Update Process Overview



What Needs to Change?

- Review secondary build tasks for new drug builds
- Review protocols for investigational and chemotherapy medications to identify DERS limits
- Review package insert and tertiary literature for medications also available commercially
- For medications already in the library, is a new entry needed for more stringent or unique DERS settings?
- Identify required ALIAS changes with each update

Find Orders in SmartGroup or Order Group [1238754] as of Wed 9/2/2026 12:09 PM

Detail List Explore

Filter Re-run Report Select All

Order Group ID	Group Information	Med/Proc/Panel ID	Order Display Name	Default?	Order Mode	Dose	Max Dose	Max Dose Unit	Rule Template
252749	CHEMO - INV (COMPASS) OZURIFTAMAB VEDOTIN 1.8 MG/KG (MAX: 180 MG) IV OVER 30 MIN ONCE (OFFSET 30 MIN) [252749] Contact #2, 8/7/2026 Status: Released Publish Status: Not Published	ERX 4082671	INV (COMPASS) ozuriftamab vedotin IV 1.8 mg/kg (Treatment Plan)	☐	Inpatient	1.8 mg/kg	180	mg [3]	

SmartGroup Information

CHEMO - INV (COMPASS) OZURIFTAMAB VEDOTIN 1.8 MG/KG (MAX: 180 MG) IV OVER 30 MIN ONCE (OFFSET 30 MIN) [252749] Expand All Collapse All

☐ INV (COMPASS) ozuriftamab vedotin IV 1.8 mg/kg (Treatment Plan) [4082671] 1.8 mg/kg, Intravenous, Once, Starting 30 Minutes after signing, For 1 Doses

Edit

CHEMO - INV (COMPASS) OZURIFTAMAB VEDOTIN 1.8 MG/KG (MAX: 180 MG) IV OVER 30 MIN ONCE (OFFSET 30 MIN) [252749] Found in 1 PRL

Protocols

Name	Contact	Status	Treatment Days
SPIP - OZURIFTAMAB VEDOTIN [1151020550]	1 of 1	Released	Cycle 1: Day 1, Day 15 Cycle 2: Day 1, Day 15 Cycle 3: Day 1, Day 15 Cycle 4: Day 1, Day 15

Variables Task Notes RITM Details

Work notes list

Work notes

Will be added to quarterly drug library on 9/15: Mg and mg/kg dosing; MAX dose: 1.8 mg/kg and 180mg; Duration 30 minutes. Will need to update alias from INVDRUG to OZURIFTAMAB

☐ Additional comments (Customer visible) Post

ERX Alaris Pump info [1238753] as of Wed 9/2/2026 12:05 PM

Create Subset Medication Admin

Detail List Explore

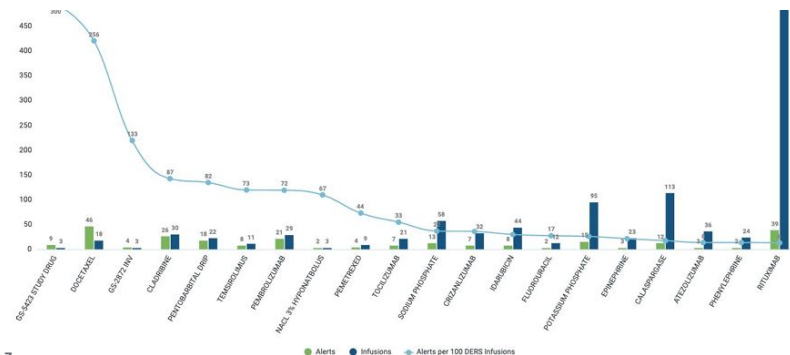
Filter Clear All Filters Re-run Report Refresh Selected

Medication ID	Medication Name	Configuration Status	IP Order Display Name	Ordering Group	Medication Dispensable Products	MPI Type	MPI ID	Infusion Group	Pump Out of Scope	Pump Dosed Mode	General Infusion Fluids
4082670	INV (COMPASS) OZURIFTAMAB VEDOTIN 10 MG/ML IV SOLN	Validation Complete	INV (COMPASS) ozuriftamab vedotin injection 10 mg/mL	Chemotherapy [1000]					X	X	X
4082672	INV (COMPASS) OZURIFTAMAB VEDOTIN IV IN 100 ML	Validation Complete	INV (COMPASS) ozuriftamab vedotin IV in 100 mL	Chemotherapy [1000]		INFUSION ORDERS - ERX - BD	INVDRUG	✓	X	✓	X

Reviewing the Data

ALERT REVIEW

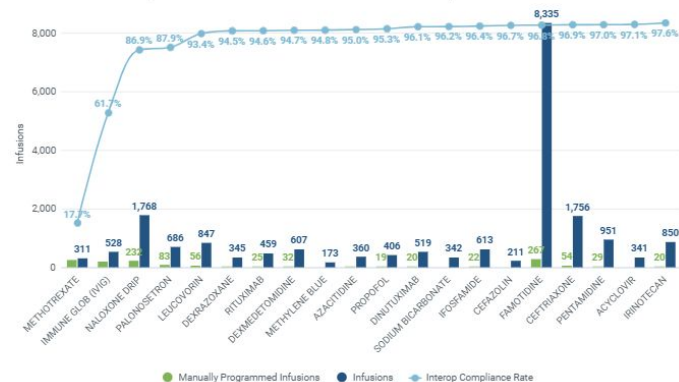
- Top alerting medication review
- Top alerting **HIGH ALERT** medications



7

INTEROPERABILITY

- Interoperability compliance reports
- Infusion programming outside of the interoperability workflow



Approval Workflow

STEP 1

Subject Matter Expert Approval

Investigational Medications:
Investigational Studies Pharmacists

Antimicrobials: Infectious Diseases
Pharmacists



STEP 2

Committee Approval

Medication Infusion Technology
Committee
Library updates reviewed quarterly



STEP 3

Change Management

Change Advisory Board approval
Awareness for Clinical Applications in
the event of concerns or conflicts

Rollout and Adoption Tracking

Push out library update

COMMUNICATE

Getting the word out

- Safety briefing
- Safety huddles
- Email to Nursing Leadership teams
- MIT members help to facilitate updates in their own units
- Implementing audit for storage

TRACK

Confirming uptake

- Check in with nursing on uptake progress for 2 weeks - longer if needed
- RFID tracking to facilitate updates
- Send updates on location of pumps with outdated library

Challenges We've Run Into

01

Study Drug Units

Units that don't exist in the pump library.

02

Extended Infusion Durations

Protocols running more than 10% beyond expected duration — what's causing it?

03

Existing Entries

Investigational meds that already have an entry, when a separate entry is needed.

04

Drug vs. Placebo

Blinded studies requiring distinct drug and placebo entries.

05

Infusion Types

Non-intermittent investigational or non-formulary drugs between updates.

06

Combination Bags

Co-administered products such as cytarabine/daunorubicin.

Where We Go Next

FUTURE IMPROVEMENT

Continuous entries for NF/INV
Fluid entry for NF/INV

Non-formulary and investigational medications



A short horizontal bar with a blue segment on the left and a green segment on the right.

National Infusion Collaborative

2026 Member Survey

Joanne Hatfield, PharmD, BCPS
Director - Clinical Solutions
Bainbridge Health

2026 NIC Member Survey

Goals and Demographics



Goals of the survey

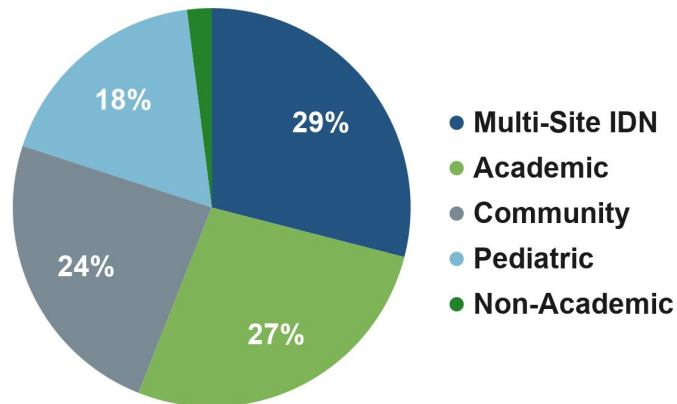
Specify safety metrics being tracked on a regular basis

Gather actionable feedback from members who have selected new infusion pumps recently

Outline defining characteristics of health systems live with interoperability

Examine ongoing challenges health systems continue to face related to smart infusion pumps

Describe your health system



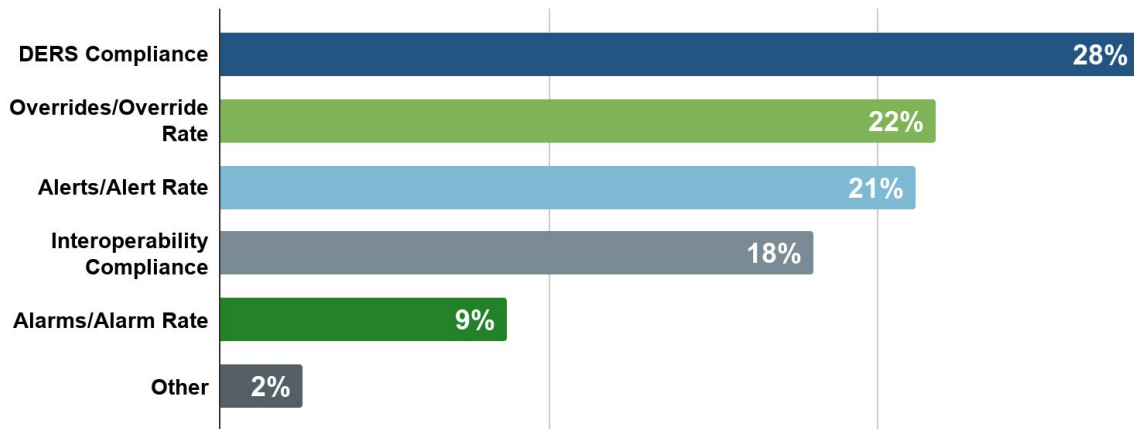
2026 NIC Member Survey

Results: Safety Metrics



33% of respondents state their biggest challenge with smart infusion pumps is Improving Safety Metrics

Most Valuable Safety Metrics to Track Regularly



Other: Reprogramming Response, Cost/Harm Averted

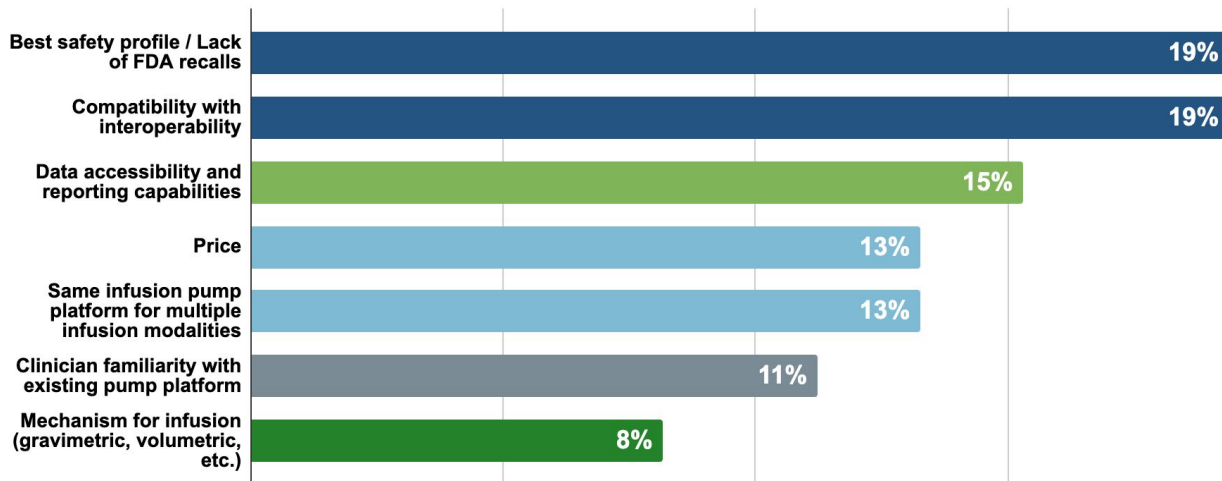
2026 NIC Member Survey

Results: Smart Pump Transition



18% of respondents report they are considering new smart infusion pumps in the next 2 years, compared to over 60% of respondents from the [2024 NIC Survey](#)

Top Factors in Smart Infusion Pump Selection



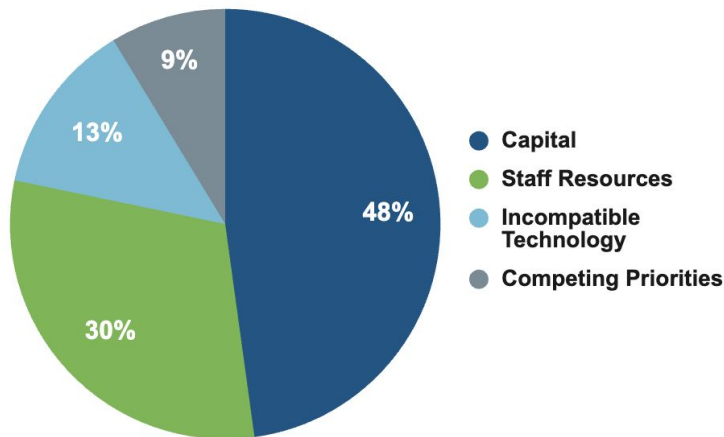
2026 NIC Member Survey

Results: Smart Pump Interoperability



49% of respondents are not live with Interoperability

Barriers to Implementation



51% of respondents are live with Interoperability

Characteristics of Interoperability

All are live in Acute Care, with 96% live in Emergency Department

Majority are live with both LVP and Syringe Pumps

There is not a standard calculation to define **Interoperability Compliance**, with many respondents reporting in more than one way

2026 NIC Member Survey

Results: Ongoing Challenges / Desired Changes



Theme	% Respondents
Program Leadership & Collaboration → Increase governance, leadership support, nursing engagement, multidisciplinary committees, and accountability	33%
Technology, Data & Analytics → Tools for better reporting, dashboards, analytics, AI-assisted review, and trend identification	20%
Standardization & Optimization → Standardized drug libraries, workflows, education, competency, and best practice sharing	18%
Capacity & Resources → Additional FTE support, protected time, and dedicated pump teams	16%
Advance Integration & Connectivity → Improve EHR integration, auto-programming process, PCA and OR interoperability, and wireless connectivity	14%

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Questions?

Joanne Hatfield

joannehatfield@bainbridgehealth.com

Becky Judge

beckyjudge@bainbridgehealth.com

Navigating Zoom

Q&A Box: For any questions or comments throughout the presentation

Post-Meeting Survey: Following today's meeting, please let us know how we can improve going forward



NATIONAL INFUSION
COLLABORATIVE

ASHP Midyear 2026

National Infusion Collaborative & Bainbridge Health Network Event

Where: TopGolf Orlando

When: Sunday, December 6, 2025 - 6 PM - 8 PM (ET)

[Registration Link](#)

