

NATIONAL INFUSION COLLABORATIVE

State of Infusion Report

January 2025



National Infusion Collaborative Network



40 States



461 Sites



87,788 Beds



41.7%
Live with
Interoperability

The National Infusion Collaborative programmed

29,062,399 infusions

July 1, 2024 through December 31, 2024

Who We Are

Mission

Data

The NIC, formed in partnership with Purdue University's REMEDI organization and Bainbridge Health, brings together Pharmacy, Nursing, Quality, and Safety leaders focused on infusion pump data analytics and safety practices.

The goal of the National Infusion Collaborative is to leverage its unique network of practitioners and national dataset to drive unprecedented network benchmarking and knowledge-sharing.

Data is from a vendor agnostic data set from over 400 hospitals across the United States. Data is being shared on a semi-annual basis to provide insight into infusion pump metrics and alert trends. Data in this report is from July 1, 2024 through December 31, 2024.

Network Benchmarking

July 1, 2024 through December 31, 2024

	DERS* Compliance	Alert Rate	Override Rate
NIC Network	88.2%	6.4%	67.5%
Live with Interoperability	88.6%	6.1%	72.2%
Not live with Interoperability	88.0%	6.6%	65.1%
Adult Hospital Type	88.8%	6.3%	68.1%
Pediatric Hospital Type	86.9%	6.8%	66.1%

^{*} DERS: Dose Error Reduction Software

54.7%
Interoperability
Utilization

Interoperability pump programming occurred in 54.7% of all infusions within health systems live with smart pump interoperability. (Range 19.2-75%)

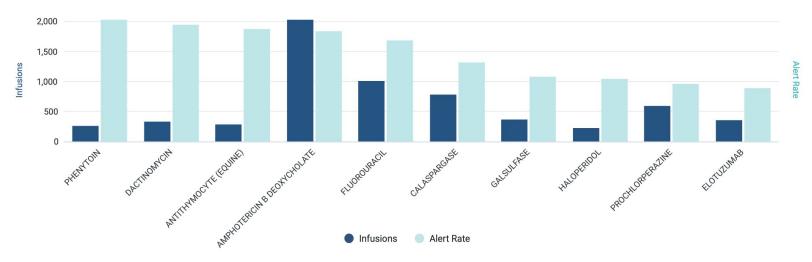
Health systems live with interoperability have on average **4.5** care profiles. Those not live with interoperability have on average **7.3** care profiles.

4.5
Interoperability
Care Profiles

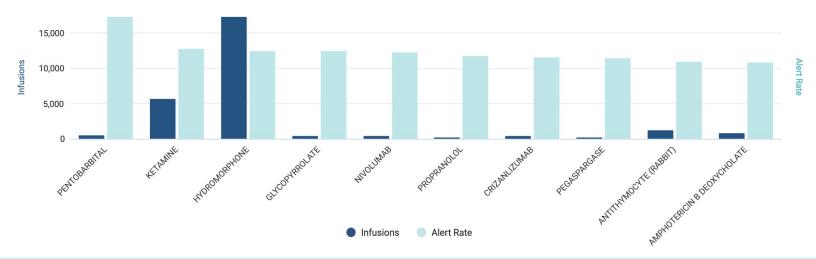
Alert Metrics

July 1, 2024 through December 31, 2024

Highest Alert Rate Entries in Adult Patients



Highest Alert Rate Entries in Pediatric Patients



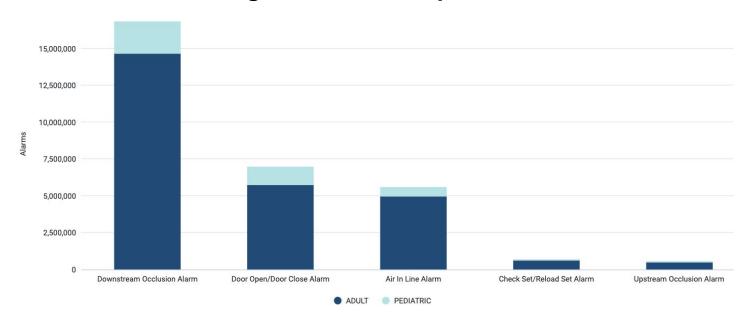
A Closer Look at Alert Trends

- 1,598,997 alerts fired across the NIC over 6 months
- Phenytoin has the highest alert rate in adults. These are primarily concentration alerts due to confusion between Phenytoin and Fosphenytoin
- Similarly, duration alerts contribute to the high alert rate for Amphotericin B
 Deoxycholate in adults due to confusion between formulations
- Ketamine and Hydromorphone have significantly high alert rates in pediatrics. These
 are primarily dose alerts due to a wide range of dosing for different indications

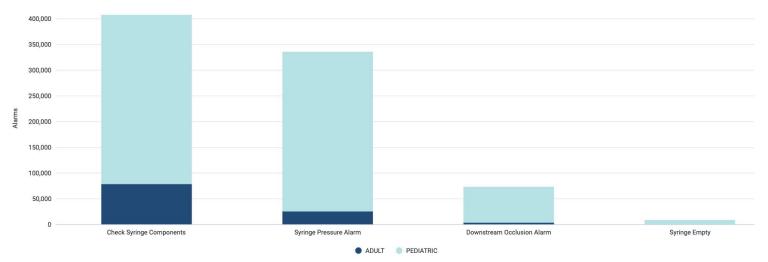
Alarm Metrics

July 1, 2024 through December 31, 2024

Large Volume Pump Alarms



Syringe Pump Alarms



A Closer Look at Alarm Trends

- 31,967,264 alarms fired across the NIC over 6 months
- There is on average 1 alarm per infusion programmed
- Downstream Occlusion Alarms are the most common alarm type for large volume pumps across all patient populations
- Syringe pump alarms are more common among pediatric patients, with Syringe
 Component Alarms (barrel, flange, lever, plunger, etc.) being the most common alarm type

NIC Meetings Recap

IV Fluid Mitigation Efforts

December 2024 | Watch Here

This fall's hurricane damage caused a nationwide shortage of large-volume IV fluids.

Baptist Health reduced IV fluid utilization by over 40% through strategic resource management and clinical practice modifications. Sanchita Damania, PharmD, and Gregory Fakelmann, PharmD, shared their approaches to scaling and conserving IV fluids, providing actionable strategies to address this critical challenge.





Sanchita Damania, PharmD Director of Medication Safety and Regulatory

Gregory Fakelmann, PharmDSystem Director of Pharmacy
Clinical Services



Standardize 4 Safety (S4S) Implementation Experiences

September 2024 | Watch Here



Mary Ann Kliethermes, B.S., Pharm., PharmD, FAPhA, FCIOM Director, Medication Safety and Quality

Quality ashp

Jeff Hurren, PharmD, BCPS
Medication Safety Officer
MICHIGAN MEDICINE



The ASHP Standardize 4 Safety (S4S) initiative emphasizes the importance of standardized IV medication concentrations, though alignment can be challenging.

Michigan Medicine's **Jeff Hurren**, **PharmD**, **BCPS**, and ASHP's **Mary Ann Kliethermes**, **PharmD**, **FAPhA**, **FCIOM**, shared insights on implementing and adapting these standards in practice.

Pump Transition Experiences

June 2024 | Watch Here

This quarter's NIC clinical meeting will explore member experiences with smart infusion pump transitions, including results from the recent NIC survey.

Alina Youssef, PharmD, BCPS, and Sarah Stephens, PharmD, CPPS, FASHP, will join to share insights and participate in an open discussion and Q&A on their pump transition journeys, offering strategies and lessons learned.



Sarah Stephens, PharmD,
CPPS, FASHP
Network Medication Safety Officer
HONORHEALTH

Alina Youssef, PharmD, BCPS Clinical Pharmacy Specialist, Critical Care

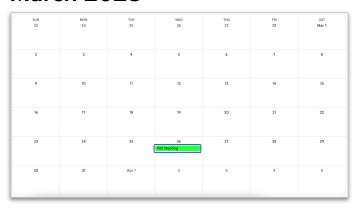




Looking Ahead

We're targeting mid-to-late March for the next National Infusion Collaborative meeting. Stay tuned for registration information!.

March 2025



Question? Comment?

From future topic ideas to general feedback, we want to hear from you.

Please email us at nic@bainbridgehealth.com.



Missed a Meeting?

The NIC Meeting Archive is accessible to all NIC members.

Click here to access the archive.



Thank you to the member organizations who support the NIC



UMassAmherst

Elaine Marieb Center for Nursing and Engineering Innovation



Regenstrief Center for Healthcare Engineering