



New York State  
Partnership  
for Patients



## Advancing Opioid Safety and Glycemic Control in the Inpatient Setting

*A partnership of the Healthcare Association of New York State  
and the Greater New York Hospital Association*



# Adverse Drug Event Implications

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## ADEs in Inpatient Settings:

- Account for an estimated 1 in 3 of all hospital adverse events
- Affect about 2 million hospital stays each year
- Prolong hospital stays by 1.7 to 4.6 days

## ADEs are:

- Common
- Clinically significant morbidity
- Preventable



# Focus on Opioid Safety and Glycemic Management

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- Based on feedback from hospitals, opioid safety and glycemic management are a challenge for hospitals
- NYSPFP partnering with the Society of Hospital Medicine
  - Engage expert clinical faculty
    - Evidence-based guidelines and best practices
    - Sample protocols and order sets
    - Experience operationalizing clinical evidence into clinical practice



# ADE Educational Programming

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- Events:
- Three didactic webinars per each high-risk medication topic
  - Two case based learning interactive webinars per high-risk medication topic
  - One “best of” hospital will present a case study webinar of how an identified hospital was able to improve patient outcomes associated with prescribing and use of at least one of the high risk medications.
- One annual in-person workshop to review didactic content, share examples of success stories among hospitals and receive in-person coaching from physician experts to support improvement of practice related to high-risk medication use in the hospital.
  
- 2017 In Person Trainings:
  - Albany: Wednesday, May 10, 2017
  - Syracuse: Thursday, May 11, 2017
  - Buffalo: Friday, May 12, 2017
  - Hauppauge: Monday, May 22, 2017
  - NYC: Tuesday, May 23, 2017



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# NYSPFP Hospital Experiences

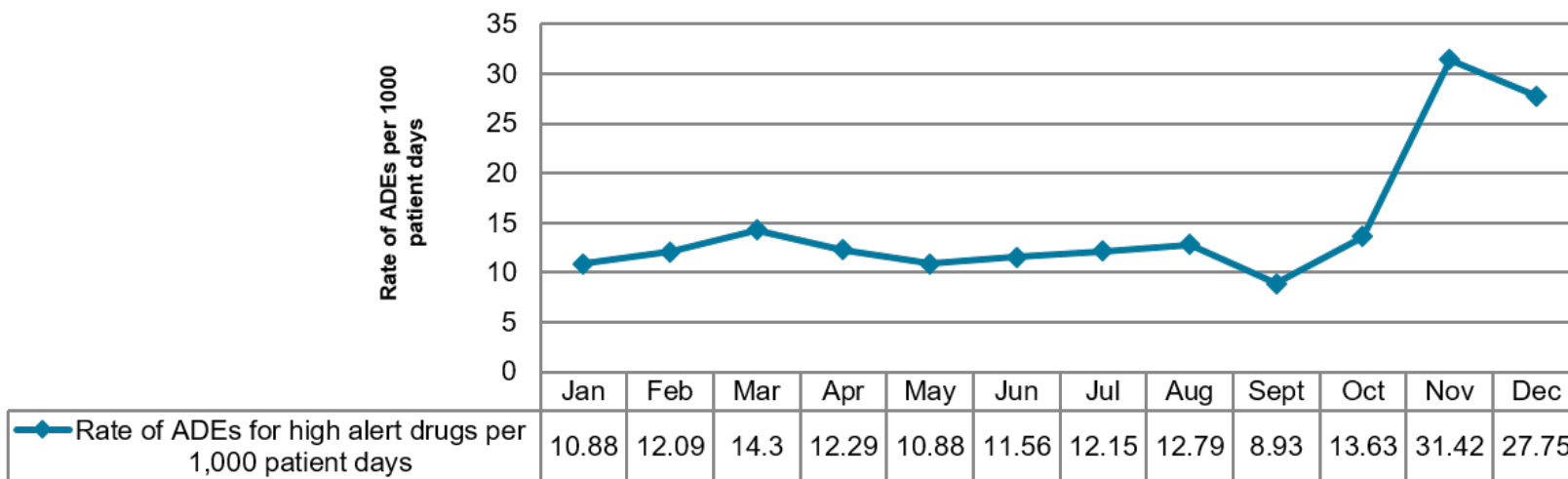
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# NYSPFP ADE Metrics

Measure Type	Measure Description	Numerator Definition	Denominator Definition	Data Submission Time Period
Outcome	Rate of ADEs for high alert drugs per 1,000 patient days	Number of total ADEs for anti-coagulants, insulin, and opioids	Number of total patient days	Monthly

**ADEs for High Alert Drugs  
2016**

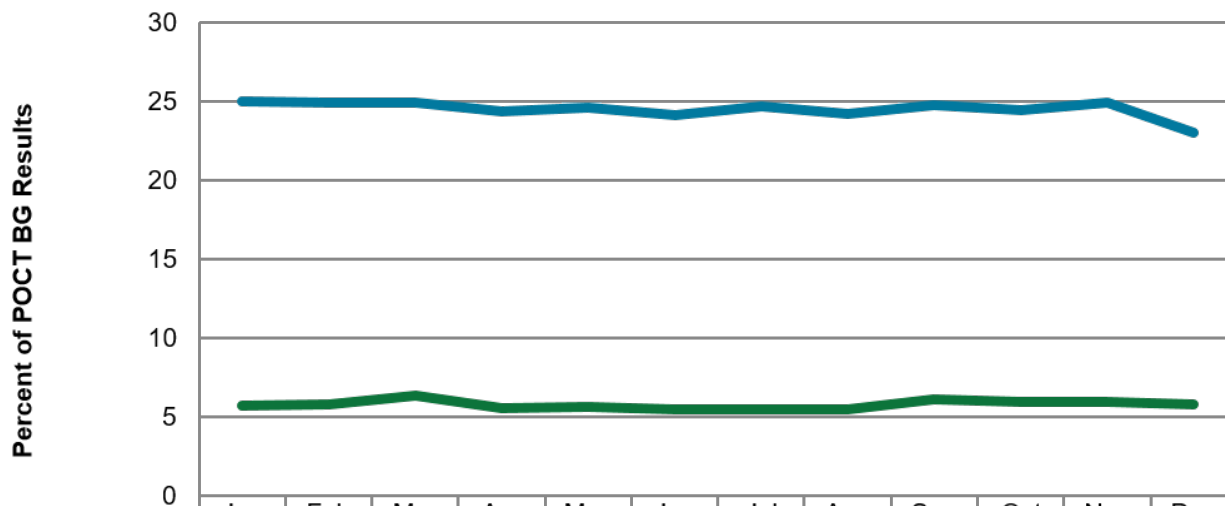




# Insulin ADE Measure #1 and #2

Measure Type	Measure Description	Numerator Definition	Denominator Definition	Data Submission Time Period
Process Measure	Percentage of hyperglycemic POCT blood glucose results $\geq 200$ mg/dL	Number of POCT blood glucose results with values $\geq 200$ mg/dL	Number of all POCT blood glucose tests resulted	Monthly
Process Measure	Percentage of hyperglycemic POCT blood glucose results $\geq 300$ mg/dL	Number of POCT blood glucose results with values $\geq 300$ mg/dL	Number of all POCT blood glucose tests resulted	Monthly

**Percent of POCT Blood Glucose Results  $\geq 200$  mg/dL and  $\geq 300$  mg/dL 2016**



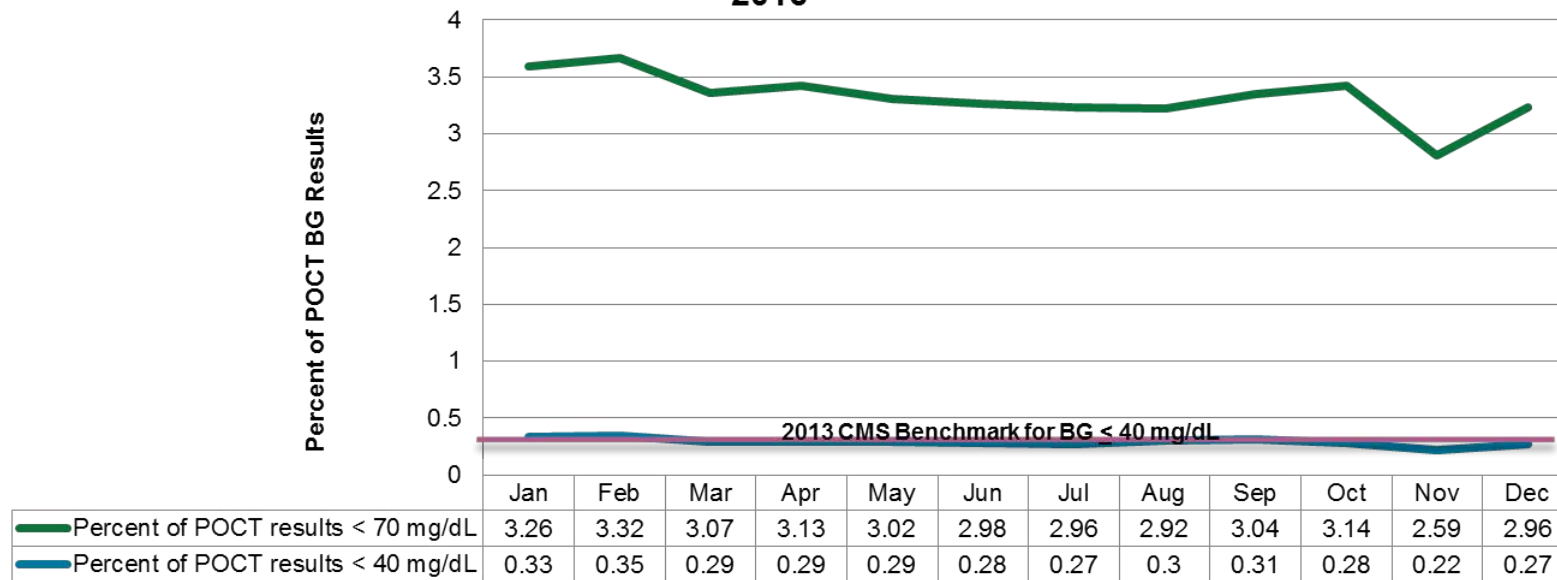
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
■ Percent of POCT results $> 200$ mg/dL	25.02	24.89	24.91	24.33	24.59	24.07	24.7	24.21	24.74	24.4	24.9	23
■ Percent of POCT results $> 300$ mg/dL	5.71	5.78	6.31	5.58	5.61	5.45	5.48	5.44	6.11	5.91	5.95	5.75



# Insulin ADE Measure #3 and #4

Measure Type	Measure Description	Numerator Definition	Denominator Definition	Data Submission Time Period
Process Measure	Percentage of hyperglycemic POCT blood glucose results $\leq 40\text{mg/dL}$	Number of POCT blood glucose results with values $\leq 40\text{mg/dL}$	Number of all POCT blood glucose tests resulted	Monthly
Process Measure	Percentage of hyperglycemic POCT blood glucose results $\leq 70\text{mg/dL}$	Number of POCT blood glucose results with values $\leq 70\text{mg/dL}$	Number of all POCT blood glucose tests resulted	Monthly

**Percent of POCT Blood Glucose Results  $\leq 40\text{mg/dL}$  and  $\leq 70\text{mg/dL}$  2016**



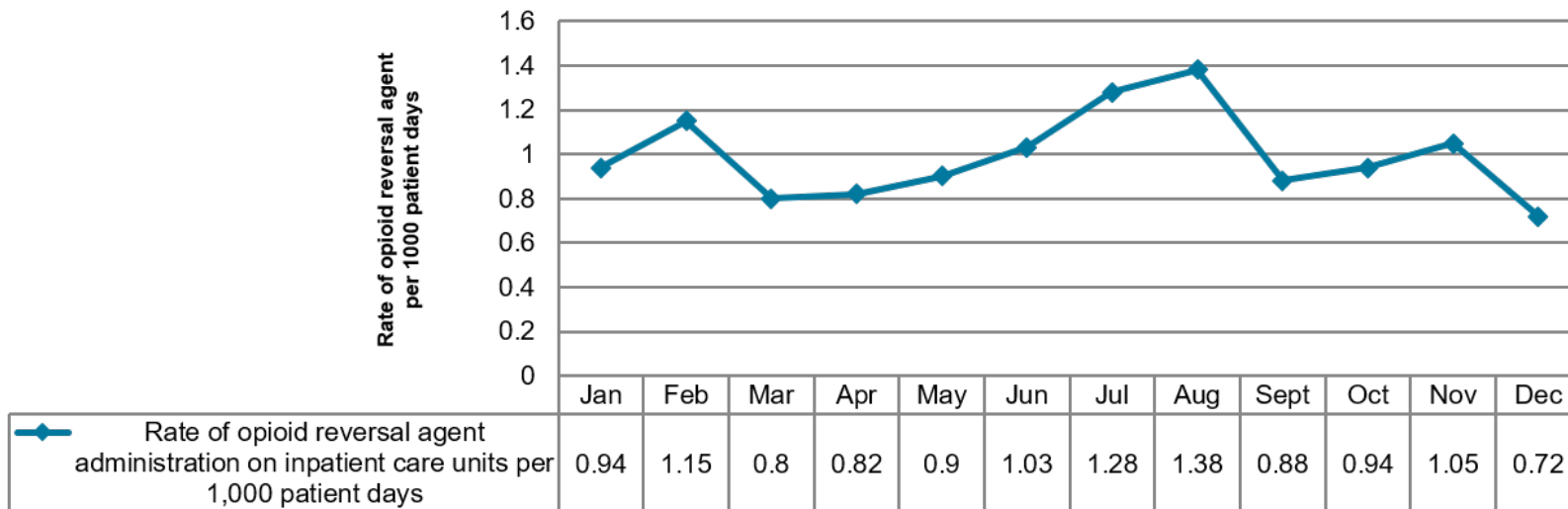




# Opioid ADE Measure

Measure Type	Measure Description	Numerator Definition	Denominator Definition	Data Submission Time Period
Process Measure	Rate of opioid reversal agent administration on inpatient care units per 1,000 patient days	Number of naloxone doses administered on inpatient care units	Number of total patient days	Monthly

**Opioid Reversal Agent Administration 2016**





# NYSPFP Resources



New York State Partnership for Patients

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## Nursing-Centered Initiatives Adverse Drug Events

### NYSPFP ADVERSE DRUG EVENT REDUCTION INITIATIVE TEAM ACTION PLANNING WORKSHEET FOR INSULIN

The following practice recommendations checklist, developed by NYSPFP in partnership with the Institute for Safe Medication Practices (ISMP), provides insulin-related process improvement strategies for consideration as hospitals work to reduce adverse drug events.

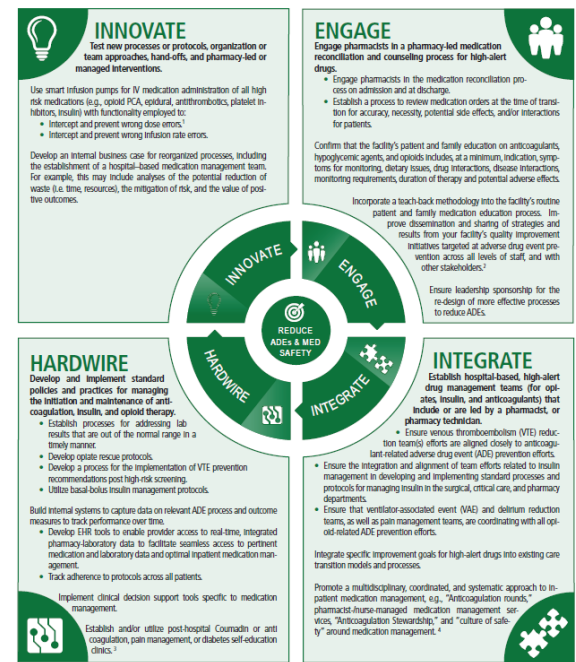
PRACTICE RECOMMENDATIONS	CHECKLIST OF HOSPITALS IMPLEMENTATION STATUS			ACTION PLAN/NEXT STEPS
	FULLY	PARTIALLY	NONE	
Practice Recommendations for Insulin				List specific activities your team will do to accomplish to fully implement each practice recommendation. Include a detailed plan (what, who, how, and starting when) in your notes.
Insulin infusions are prepared by the pharmacy.				
Insulin infusions are standardized to one concentration.				
U-500 insulin doses are prepared by the pharmacy.				
Pediatric dilutions of insulin are prepared by the pharmacy.				
Patient-specific doses of long-acting insulins are dispensed by the pharmacy.				
A standardized hypoglycemia protocol is ordered and readily available for each patient receiving insulin.				

## Nursing-Centered Initiatives Action Planning Resource Guide

- Adverse Drug Events
- Falls with Harm
- Pressure Ulcer Prevention
- Venous Thromboembolism

2013

## NYSPFP GUIDING PRINCIPLES FOR THE REDUCTION OF ADVERSE DRUG EVENTS & MEDICATION SAFETY



1. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. 2013 National Action Plan for Adverse Drug Event Prevention. Washington, DC: Author; 2013. Minnesota Hospital Association. 2013 Care Coordination, Safety and Quality Improvement Plan. 2013. Minnesota Hospital Association. 2013 Care Coordination, Safety and Quality Improvement Plan. 2013.



# NYSPFP Resources

## Adverse Drug Events

### Bedside Safety Initiatives



INITIATIVE OVERVIEW   MEETING MATERIALS   **TOOLS & RESOURCES**

Check this page often for updated tools and resources from the NYSPFP Adverse Drug Events Initiative.

### Suggested Best Practices and Corresponding Tools & Resources

#### Insulin

##### Advancing the Prevention of Hypo- and Hyperglycemic Events

- NYSPFP Webinar: Hypoglycemia Prevention and Management - Measurement that Matters and the Power of Collaboration
- NYSPFP Webinar: Optimizing Diabetes and Hyperglycemia Management in the Inpatient Setting
  - UC San Diego Insulin Management Algorithm
  - UC San Diego Glycemic Control Intake Survey
- NYSPFP Webinar: Safe Glycemic Control - A Team Sport NYSPFP Educational Conference Featuring ISMP: Reducing the Risk of Patient Harm - A Focus on Insulin

##### Action Planning Worksheet with Best Practice Recommendations

- [Insulin](#)

#### Anticoagulants

#### Opioids

#### Medication Reconciliation

#### Additional Resources:

### Reference Guides:

- [NYSPFP Nursing Resource Guide](#)
- [NYSPFP Patient and Family Engagement Resource Guide](#)
- [NYSPFP Preventable Readmissions Action Planning Resource Guide](#)

### No Harm Across the Board Resources:

- [Adverse Drug Events Poster](#)
- [NYSPFP Guiding Principles for the Reduction of Adverse Drug Events](#)
- [Gap Analyses](#)
- [Checklists](#)

### Data Tracking and Measurement:

- [NYSPFP Sample Process Measure Tracking Tool for Mechanically Ventilated Patients](#)
- [ADE Measure Project: Measure Definitions and Criteria](#)
- [Optional Measures](#)



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# NYSPFP Data Portal

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# [www.nyspfp.org](http://www.nyspfp.org)

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## Adverse Drug Events (ADE)

### Data Collection

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- **Submit Outcome and Process measures**

### Reports

- **ADEs - Outcome Measure Reports**
  - **ADE Outcome Report**
  
  - **Potential ADEs - Process Measure Reports**
  - **INR  $\geq$  5**
  - **Blood glucose  $\geq$  200 mg/dL**
  - **Blood glucose  $\geq$  300 mg/dL**
  - **Blood glucose  $\leq$  40 mg/dL**
  - **Blood glucose  $\leq$  70 mg/dL**
  - **Naloxone doses administered**
-



# Data Portal Entry

Reporting Period:  ▼

## Adverse Drug Events - Outcome and Process Measures:

### Rate of ADEs for high-alert drugs per 1,000 patient days

Number of total ADEs for anticoagulants, insulin, and opioids

Number of total patient days

### Percentage of Supratherapeutic INR results

Number of INR results with values  $\geq 5$

Number of all INR tests resulted

### Percentage hyperglycemic POCT blood glucose results $\geq 200$ mg/dL

Number of POCT blood glucose results with values  $\geq 200$  mg/dL

Number of all POCT blood glucose tests resulted

### Percentage of hyperglycemic POCT blood glucose results $\geq 300$ mg/dL

Number of POCT blood glucose results with values  $\geq 300$  mg/dL

Number of all POCT blood glucose tests resulted

### Percentage of hypoglycemic POCT blood glucose results $\leq 40$ mg/dL

Number of POCT blood glucose results with values  $\leq 40$  mg/dL

Number of all POCT blood glucose tests resulted

### Percentage of hypoglycemic POCT blood glucose results $\leq 70$ mg/dL

Number of POCT blood glucose results with values  $\leq 70$  mg/dL

Number of all POCT blood glucose tests resulted

### Rate of opioid reversal agent administration on inpatient care units per 1,000 patient days

Number of naloxone doses administered on inpatient care units

Number of total patient days



# Agenda

Time	Topic	Presenter
9:00 am – 9:15 am	Introduction	NYSPFP Staff
9:15 am – 12:15 pm	Reducing Adverse Drug Events from Opioids (RADEO)	Matthew Jared, MD Hospitalist St. Anthony Hospital Oklahoma City, OK
12:15 pm – 1:00 pm	Lunch on your own	
1:00 pm – 2:30 pm	Improving Glycemic Control in the Critical Care Setting	Naina Sinha-Gregory, MD Assistant Professor of Medicine Division of Endocrinology, Diabetes & Metabolism Weill Cornell Medical College
	Improving Glycemic Control in the non-Critical Care Setting	
2:40 pm – 3:50 pm	Implementing Hospital Policies and Procedures	Jane Seley, DNP, MPH, MSN, BC-ADM, CDE Diabetes Nurse Practitioner Certified Diabetes Educator New York Presbyterian/Weill Cornell
	Transitional Care from Inpatient to Outpatient	
3:50 pm – 4:00 pm	Closing and Evaluations	NYSPFP Staff



# SHM Faculty

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**Matthew Jared, M.D.**  
Hospitalist  
St. Anthony Hospital  
Oklahoma City, OK



**Naina Sinha, MD**  
Assistant Professor of Medicine  
Division of Endocrinology, Diabetes &  
Metabolism  
Weill Cornell Medical College



**Jane Seley DNP, MPH, MSN, BC-ADM, CDE**  
Diabetes Nurse Practitioner  
Certified Diabetes Educator  
New York Presbyterian/Weill Cornell  
New York, NY





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## Next Steps

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## Next Steps

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- **Schedule medication and glycemic management team meetings**
- **Develop work plan to implement management protocols and order sets**
- **Develop improvement strategies based upon findings**
- **Collect and submit data**
- **Participate in upcoming coaching calls and webinars**
- **Contact your project manager with questions**