AAMI Foundation Presents:

Post Infusion Management Implementation
A Team Approach to Patient Care

Karen Corrick, BSN, RN
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Great River Medical Center – Burlington, Iowa
AAMI Foundation

Vision: To drive the safe adoption and safe use of healthcare technology

Complimentary Resources: [www.aami.org/thefoundation](http://www.aami.org/thefoundation)

- National Coalition for Infusion Therapy Safety
- **National Coalition to Promote Continuous Monitoring of Patients on Opioids**
- Compendium: Opioid Safety & Patient Monitoring
- **National Coalition for Alarm Management Safety**
- Compendium: AAMI Foundation Management of Clinical Alarm
A Special Thanks

NACNS
National Association of Clinical Nurse Specialists
Thank You to Our Premier Industry Partners

Without the generous support of our industry partners, we would not be able to produce the many tools and deliverables created by the coalition to help you improve infusion therapy safety. The AAMI Foundation is managing all costs for the series. The seminar does not contain commercial content.
LinkedIn Questions

Join our group

Please post questions on the AAMI Foundation’s LinkedIn page.

OR

Type a question into the question box on the webinar dashboard.
Polling Questions
Speaker Introductions

Karen Corrick, BSN, RN
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Post Infusion Management Implementation
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Team Effort
Overview

- Identify which other systems might be affected by your Infusion Management Implementation: servers, viewing tools for those servers, E.H.R., Lab, Anesthesia, Critical Care software, dashboards.
- Identify what the end user will see and how the data will be saved and displayed.
- Multiple domains – 1 LIVE domain; other testing domains
- Familiar with all equipment being used
• Device Maintenance and troubleshooting
• Barcode creation and assignment for pump
• IP addresses – Prod and non-prod environments
• Manage application to configure, manage and monitor device integration server
• Connectivity troubleshooting with IT
• Redirecting pumps for testing to non-prod domains
• Process for new or rented equipment

BioMed
• ADT Interface for IV pump real time dashboard
• Device Integration Server – Consider increasing RAM
• Upgrades – Ensure that all servers and software are at optimal upgrades
• Back up for Biomed to manage application to configure, manage, and monitor device integration server
Nursing Informatics

- Testing Devices & Follow-up
- Support Education and staff
- Frequent rounding with staff
- Immediate follow-up with issues
- Workflows and various processes from department to department: ED, PACU, ICU, Med/Surg areas
- Workflows for fluid boluses: 500 ml versus 1000 ml bags
- Medication bolus workflow
- Review policies – Primary fluid for Secondary lines
- Coordination of oversight team and super users
- Compile data, monitor, and follow up
- Designated “owner/coordinator” of work
- Manage phone hotline for staff to call when having an issue for immediate at elbow assistance
- Best to troubleshoot issues in real time
IV Pump Functionality

• Consider model(s) and type(s) for design and testing
• Auto programming- Orders set up, Patient, Med, Pump, EHR
• Drug Library
• Inquire about testing scenarios and reference and troubleshooting tools for testing steps
• Height and/or Weight may be required; other required documentation
• Extensive testing
• Step by step instructions so issues can be appropriately identified
• Nursing staff testing familiar with various workflows
• Testing Process – Keep consistent
• Know your pump!
• Know various areas and their workflow
• Error messages – Administering Meds
• Production and non-production domains must match!
• Drug mapping file on each pump needs to be updated
• Process for keeping the drug library updated
• Work flow for meds like Amiodarone: Bolus versus drip
• Process for Pediatric patient population
• Process for Hematology / Oncology Medications
• Dashboard for all IV infusions
• Available for LIVE including testing pumps
• Utilized for compliance of pump association
• Pharmacy has access to monitor infusions real time
• Pharmacy has access to view rates and monitor patients real time

Real Time Infusion Dashboard
Real Time Infusion Dashboard

- Schedule
- Email
- Variety of Surveillance Reports
• First 6 months of 2015
• Drug Library Utilization - low
• Alerts – 15% above B|BRAUN’s national average
• Overrides – high
• Corrections – 5.9% above B|BRAUN’s national average
• Good catches
• Dose limits for Dobutamine used for stress tests
• Dose limits for Oxytocin
Response to Analysis Report

- Reviewed soft/hard limits on top 9 Continuous infusions
- Reviewed work flow with staff
- Comparison with other facilities
- Reviewed with Physician committees for approval
- Adjustments to soft/hard limits
Pump Troubleshooting

- Pump needs to be on about a minute prior to programming
- Pump spacing on poles 3-4 inches apart or we have connection issues in certain rooms
- Separate pumps to different poles
- Glass doors in our ICU causes issues with connectivity
- Other wireless devices interfere with connectivity
- Shut off, unplug, turn on
- Programming the pump manually without scanning med/ creating another charge
- Wireless connectivity
• Train the Trainers with IV pump vendor assist
  • Retrain as necessary
  • Paper cheat sheets
  • Limit class size
  • Hands on
• Follow up with staff as needed
  • Visible rounding and monitoring/data
• Hold staff accountable- work closely with Nursing Leadership
Nursing Workflow Considerations

• Use Error
• Inconsistent processes with secondary meds
• Inconsistencies with staff, reviewing and signing data, especially at change of shift
• Staff resistance
• Not a time saver up front
• Staff ‘buy in’: Utilizing the drug library and auto-pump programming workflows
• Staff like the functionality of rate changes on the pumps and automatic flow to documentation date/time
• Review and sign as appropriate for assessment of patient
• Staff like the IV intake populating automatically to the EMR
• Staff are calling to report problems or ask for help
• Pump association improved by 65%
• Scanning of IV fluids, continuous meds and IVPB improved 3%
• Errors decreased by 21%

More Wins!
Financial Gains

- Average cost of an ADE is approximately $8750
- Charge capture
Future Work

• Training and transition for leaders to review of the real time infusion dashboard
• Understanding and utilization of analysis reports available from IV pump vendor
• New employee orientation
• Continuous rounding - needs to be consistent and does not go away
• Creation of reports from EMR vendor and IV pump vendor to follow up on patients with infusion medications, but IV pump is not associated to the patient and order
Future/Ongoing Initiatives
Mark Your Calendars!

December 12, 2016; 12pm to 1pm

From Our National Coalition for Alarm Management Safety
A case study from Sentara Healthcare
“The Journey of Intelligent Alarm Management in a NICU”

Presenters: Greg Walkup, Director, IT
Monique M Lowery, BSN, RNC-NIC

The presenters will:
• Discuss their journey and experience moving from an open bay Neonatal Intensive Care Unit to a private and twin room setting in a new facility.

• Highlight the collaboration between the nursing and IT teams.

• Describe the incidence of alarm fatigue in this NICU setting, the impact on both the staff and the neonates, and the successful implementation of a process to reduce nuisance and duplicative alarms by over 50%.

• https://attendee.gotowebinar.com/register/3694209914323270147
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• Or you can email your question to: mflack@aami.org.
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Slides and Recording:

http://www.aami.org/PatientSafety/content.aspx?ItemNumber=3694&navItemNumber=3084