

Describe details leading to the telemetry event:

POLICY	YES	NO	NA
Is there a policy for monitoring of all patients on telemetry?			
Was the policy being followed?			
Does your staff have access to the policy?			
Have you discussed barriers for staff to follow policy?			
Does your policy address frequency of patch replacement?			
Does your policy address frequency of lead inspections?			
Does your policy address frequency of battery replacement?			
Does your policy address default alarm settings?			
Does your policy address when settings can be changed?			
Does your policy address volumes of alarms?			
Does your policy address response to alarms?			

Provide additional information related to the questions answered above:

INITIATION	YES	NO	NA
Did patient meet criteria for telemetry monitoring?			
Was there an order for telemetry monitoring?			
Was the patient recently transported or admitted?			
If so, was patient monitored during transport?			
Was the patient left off telemetry monitoring following transport?			
Was staff unaware that patient was on the unit?			
Were any other tasks prioritized over application of telemetry?			
Was staff interrupted prior to applying or reapplying telemetry?			
Was patient immediately toileted before telemetry applied/reapplied?			
Was proper skin prep utilized?			
Did the patches stay in place when applied?			
Did the patient have the correct telemetry box number?			
Did the waveform display on central monitor?			
Was the correct patient name on central monitor?			

Provide additional information related to the questions answered above:

MONITORING	YES	NO	NA
Was the patient being monitored per order?			
Did hand-off occur related to telemetry?			
Was the telemetry box physically connected to the patient?			
Were the patches functioning optimally?			
Were patches changed per protocol?			
Were the leads functioning optimally?			
Were the batteries functioning optimally?			
Was the telemetry box functioning optimally?			
Was equipment transmitting?			
Was the central monitor functioning optimally?			
Are central monitors easily visible to staff?			
Were alarms on and activated at time of the event?			
Were alarms personalized for patient condition?			

Provide additional information related to the questions answered above:

RESPONSE	YES	NO	NA
Did the alarms sound for this event?			
Are alarms audible throughout the unit?			
Did staff respond per protocol for this event?			
Was the alarm response escalated for this event?			
Did any previous alarms sound for this patient?			
If so, were previous alarms that sounded for this patient addressed? (e.g., leads off, battery, etc)			

Provide additional information related to the questions answered above:

What is your final understanding of the telemetry event after using this investigation tool?

The following resources, organized by the tool categories above and guiding questions, may assist you with opportunities for improvement identified during your event investigation.

Hospital Telemetry Resources

EVENT DETAILS	QUESTIONS	SOURCE	WEBSITE
POLICY	Who should have tele monitoring?	American Heart Association (AHA) Practice Standards for Electrocardiographic Monitoring in Hospital Settings	https://www.ahajournals.org/doi/10.1161/CIR.0000000000000527
		American College of Cardiology key points to remember about the 2017 update to the AHA Scientific Statement on Practice Standards	https://www.acc.org/latest-in-cardiology/ten-points-to-remember/2017/10/04/12/26/update-to-practice-standards-for-electrocardiographic-monitoring
		Implementing Practice Standards for Inpatient Electrocardiographic Monitoring	https://aacnjournals.org/ajconline/article-abstract/28/2/109/4224/Implementing-Practice-Standards-for-Inpatient?redirectedFrom=fulltext
	What are the regulations?	The Joint Commission: R3 Report Alarm System Safety	https://www.jointcommission.org/standards/r3-report/r3-report-issue-5-alarm-system-safety/
		The Joint Commission: National Patient Safety Goals for Hospitals	https://www.jointcommission.org/standards/national-patient-safety-goals/hospital-national-patient-safety-goals/
		The Joint Commission: Sentinel Event Alert Issue 50	https://www.jointcommission.org/sea_issue_50/
	What does the data show?	Patient Safety Authority (PSA) Physiologic Alarm Management	https://patientsafety.pa.gov/ADVISORIES/Pages/201109_105.aspx
		Patient Safety Authority (PSA) A Brief Analysis of Telemetry-Related Events	https://patientsafety.pa.gov/psj/Pages/2019-12-4.aspx
		Healthcare Technology Foundation (HTF) 2011 National Clinical Alarms Survey: Perceptions, Issues, Improvements, and Priorities of Healthcare Professionals	https://www.aami.org/docs/default-source/foundation/alarms/2011-htfalarmssurveyfinal.pdf
	Where do we start?	The Association for the Advancement of Medical Instrumentation (AAMI) Clinical Alarm Management Compendium: 10 Ideas for Safe Alarm Management (2015)	https://aami.org/docs/default-source/foundation/alarms/alarm-compendium-2015.pdf?sfvrsn=2d2b53bd_2
		AAMI Clinical Alarms 2011 Summit Top 10 Actions You Can Take Now	https://www.aami.org/docs/default-source/foundation/alarms/2011-alarms-summit-publication.pdf?sfvrsn=5584c8e0_2
	Do you have any tools?	Veterans Health Administration (VHA) Alarm Safety Assessment Tool	https://accenet.org/publications/Downloads/Reference%20Materials/PSAT%20for%20Clinical%20Alarms%20Safety_2013.pdf
		National Association of Clinical Nurse Specialists (NACNS) How Do I Start Checklist	https://nacns.org/wp-content/uploads/2016/11/AF-GetStarted.pdf
	How do we inventory alarm parameters?	AAMI Alarm Parameter Inventory	https://www.aami.org/docs/default-source/foundation/alarms/alarminventory-chart-2.pdf?sfvrsn=123a7eb9_0
	Is there online education/help?	Telemetry Monitoring in Pennsylvania video series	https://www.youtube.com/watch?v=cKQ5s4S7p00&list=PLwJn-tgLXAJIS5NsmypAAAnXoTNJNkv0WL&pp=iAQB
		PSA webinar (2015) Alarm Management	https://www.youtube.com/playlist?list=PLwJn-tgLXAJKm72pXOMSV8_KZZ1bCe6CC
	HELP!! I'm not sure what I need!	Improving Clinical Alarm Management: Guidance and Strategies	https://www.aami.org/docs/default-source/foundation/alarms/bit/2017-bit-ma-clinicalalarmmanagement.pdf
		VHA Alarm Safety Assessment Tool	https://accenet.org/publications/Downloads/Reference%20Materials/PSAT%20for%20Clinical%20Alarms%20Safety_2013.pdf

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RESPONSE	What's the evidence?	Managing Alarms in Acute Care Across the Life Span: Electrocardiography and Pulse Oximetry	https://www.aacn.org/~media/aacn-website/clinical-resources/practice-alerts/managing-alarms-in-acute-care-across-the-life-span.pdf
	Where are areas of opportunity?	PSA Alarm Interventions During Medical Telemetry Monitoring: A Failure Mode and Effects Analysis	https://patientsafety.pa.gov/ADVISORIES/Pages/2008sup1_01.aspx
	What about remote monitoring?	Patient Load Effects on Response Time to Critical Arrhythmias in Cardiac Telemetry: A Randomized Trial	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6226252/
INITIATION & MONITORING	Where are our nuisance alarms? What can we do?	AAMI Safety Innovations: Fighting Alarm Fatigue With Data-Driven Innovations (2016)	https://www.aami.org/docs/default-source/foundation/alarms/2016_si_nch_fighting_alarm_fatigue.pdf?sfvrsn=6b2e6179_2
		Customizing Alarm Limits Based on Specific Needs of Patients	https://array.aami.org/doi/10.2345/0899-8205-51.3.227
	How about middleware?	AAMI Safety Innovations: Clinical Practice Changes Associated With Alarm Standardization	https://www.aami.org/docs/default-source/foundation/alarms/2014_si_alarm_standardization_boston.pdf?sfvrsn=8efb7221_2
		Improving Clinical Alarm Management: Guidance and Strategies	https://www.aami.org/docs/default-source/foundation/alarms/bit/2017-bit-ma-clinicalalarmmanagement.pdf
MISC.	All around help: online resources and literature	NACNS Alarm Safety Crosswalk	https://nacns.org/wp-content/uploads/2016/11/AF-CrosswalkLitTable.pdf