

APPENDIX A

Triggers used in prospective AE surveillance

Laboratory based triggers

INR > 5	Glucoscan < 3.0	Phosphate < 0.4
K < 2.8	Glucoscan > 18 * 2	Mg < 0.4
K > 6.0	WBC < 3.0	Mg > 5.0
Na < 120	WBC > 18	pH < 7.25
Na < 150	Hb decrease > 20%	pH > 7.5
Cr > 25% change	Plt decrease > 50%	Positive HIT assay
Ck > 500	Calcium < 1.5	Positive blood culture
	Calcium > 3.0	Positive c. difficile toxin assay

Patient based triggers

Respiratory distress/Dyspnea	Unexpected death	CV Line infection
Chest pain	New DVT/PE	CV Line complication - pneumothorax
O2 sat < 90%	New Pressure Ulcer	CV Line complication - arterial injury
Systolic BP < 100	Fall resulting in injury	CV Line complication - difficult insertion (>3 attempts)
HR > 110	Pneumothorax	CV Line complication - other
Temp > 39C	Return to OR	Family/Patient dissatisfied with care
Temp < 35C	New gastric/duodenal ulcer	Altered Level of consciousness
Rash	Surgical Wound Complication	
Nausea/Vomiting	Compartment Syndrome	

System based triggers

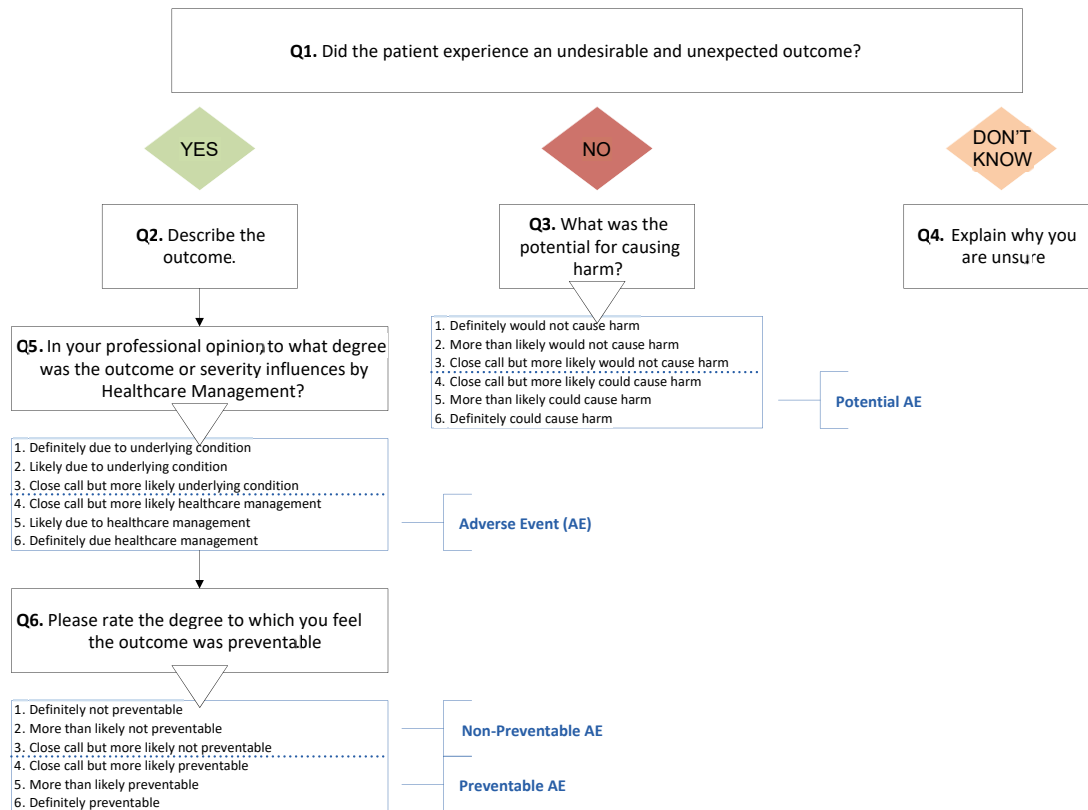
Line complication	Use of physical restraints	Delay in therapy
Foley complication	RACE call	OR cancellation
Stat ECG	Code Blue call	Diagnostic Error
Portable x-ray on floor	Transfer to ICU	Order for Blood Products
New Isolation Precautions	IV pump error	
Medical equipment problem	Medication administration error	
Unable to obtain MD in a timely manner		
Unable to obtain consultant in a timely manner		
Unable to obtain critical care bed in a timely manner		
Equipment unavailable in emergency situation		

Pharmacy based triggers

Order for Flumazenil	Order for Vitamin K
Order for Nalaxone	Order for Protamine
Order for FFP	

APPENDIX B

Clinical review questions and event definitions



APPENDIX C

Triggers identified as adverse events by reviewers

Event source (Hospital)	Reviewer (Hospital)					Total by event source
	A	B	C	D	E	
A	4/10	3/10	3/10	4/10	2/10	16/50 (32%)
B	4/10	3/10	6/10	2/10	5/10	20/50 (40%)
C	3/10	3/10	4/10	3/10	5/10	18/50 (36%)
D	2/10	2/10	2/10	3/10	4/10	13/50 (26%)
E	3/10	2/10	2/10	4/10	2/10	13/50 (26%)
Total by reviewer	16/50 (32%)	13/50 (26%)	17/50 (34%)	16/50 (32%)	18/50 (36%)	

Triggers identified as preventable adverse events by reviewers

Event source (Hospital)	Reviewer (Hospital)					Total by event source
	A	B	C	D	E	
A	3/10	3/10	3/10	4/10	2/10	15/50 (30%)
B	3/10	2/10	5/10	1/10	5/10	16/50 (32%)
C	3/10	2/10	4/10	3/10	5/10	17/50 (34%)
D	2/10	2/10	2/10	3/10	4/10	13/50 (26%)
E	3/10	0/10	2/10	2/10	1/10	8/50 (16%)
Total by reviewer	14/50 (28%)	9/50 (18%)	16/50 (32%)	13/50 (26%)	17/50 (34%)	

Note: Each reviewer rated the same 50 cases.