Trigger Tool Worksheet

Hospitals

The following table was used by the HHS Office of Inspector General (OIG) as a worksheet to identify potential adverse events in hospitals. The worksheet includes "triggers" that indicate clinicians should further review the medical record to determine if the patient was harmed. Please see the source documents for additional detail regarding use of the worksheet to identify adverse events.

Care Module Triggers		Medication Module Triggers (Continued)	
C1	Transfusion or use of blood products	M5	Rising BUN or serum creatinine greater than 2 times baseline
C2	Code/arrest/rapid response team	M6	Vitamin K administration
C3	Acute Dialysis	M7	Benadryl (Diphenhydramine) use
C4	Positive Blood Culture	M8	Romazicon (Flumazenil) use
C5	X-ray or Doppler studies for emboli or DVT	M9	Narcan (Naloxone) use
C6	Decrease of greater than 25% in hemoglobin or hematocrit	M10	Antiemetic use
C7	Patient fall	M11	Over-sedation/hypotension
C8	Pressure ulcers	M12	Abrupt medication stop
C9	Readmission within 30 days and/or Prior Admission 60 days or greater	M13	Other
C10	Restraint use	**Intensive Care Module Triggers**	
C11	Healthcare-associated infection	I1	Pneumonia onset
C12	In-hospital stroke	I2	Readmission to intensive care
C13	Transfer to higher level of care	I3	In-unit procedure
C14	Any procedure complication	I4	Intubation/reintubation
C15	Other	**Perinatal Module Triggers**	
Surgical Module Triggers		P1	Terbutaline use
S1	Return to surgery	P2	3rd or 4th degree lacerations
S2	Change in or cancelled procedure	P3	Platelet count less than 50,000
S3	Admission to intensive care post-op	P4	EBL > 500ml (vaginal) or > 1,000 ml C/S
S4	Intubation/reintubation/BiPap PACU	P5	Specialty consult
S5	X-ray intra-op or in PACU	P6	Oxytocic agents
S6	Intra-op or post-op death	P7	Instrumented delivery
S7	Mechanical Ventilation greater than 24 hours post-op	P8	General anesthesia
S8	Intra-op epinephrine, norepinephrine, naloxone, or ramazicon	**Emergency Department Module Triggers**	
S9	Post-op troponin level greater than 1.5mg/ml	E1	Readmission to ED within 48 hours
S10	Injury, repair, or removal of organ	E2	Time in ED greater than 6 hours
S11	Any operative complication	Sources: Griffin FA, Resar RK. *IHI Global Trigger Tool for Measuring Adverse Events (Second Edition),* IHI Innovation Series white paper. Cambridge, MA, Institute for Healthcare Improvement, 2009, available at www.ihi.org. OIG, *Adverse Events in Hospitals: Methods for Identifying Events* (OEI-06-08-00221), March 2010 and *Adverse Events in Hospitals: National Incidence Among Medicare Beneficiaries* (OEI-06-09-00090), November 2010, available at https://oig.hhs.gov/newsroom/spotlight/2012/adverse.asp.	
Medication Module Triggers			
M1	*Clostridium difficile* positive culture		
M2	Partial thromboplastin time greater than 100 seconds		
M3	International Normalized Ration (INR) greater than 6		
M4	Glucose less than 50 mg/dl		