

Appendix 4 The reliability of the Global Trigger Tool (n = 10)

Instrument (Reference)	Country Setting	Study size (no of included hospitals and reviewed records)	Year of studied population	Primary aim of the study	No of screenings criteria (triggers)	No of reviewers for assessment of AEs	Reviewer experience (reviewed records per reviewer)	Trainings hours	Number of records to measure reliability (n)	Prevalence Adverse events (%; 95% CI)	Kappa value AE assessment (95% CI)	Rating kappa AE	% agreement
IHI Global Trigger Tool ³⁸	Korea Hospital	1 hospital 630 records	2011	Examining inter-rater reliability	53	2	315 (630 records/2 reviewers)	NR	60	7.2	0.74	s	90
IHI Global Trigger Tool ³⁶	United States Hospital	8 hospitals 16,172 records	2007 - 2010	Measuring AE rate	53	4	4,043 (16,172 records/4 reviewers)	12 hours	94	17.1	0.62	s	NR
IHI Global Trigger Tool ⁴³	Denmark Hospital	1 hospital 240 records	2010	Examining inter-rater reliability	54	9	240 records per reviewer	Two days	240	21.0 (17–25)	0.45 (0.30 - 0.52)	m	83
Swedish Global Trigger Tool based on IHI ³⁵	Sweden Hospital	5 hospitals 50 records	2009–2010	Examining inter-rater reliability	53	5	50 records per reviewer	No training	50	20.0	0.45 (0.26-0.63)	m	88‡
IHI Global Trigger Tool ⁴⁴	United States Hospital	1 hospital 240 records	2009	Examining inter-rater reliability	53	3	240 records per reviewer	“Several training sessions”	60	25.8 (20.5–31.2)	0.85	a	NR
IHI Global Trigger Tool ³⁷	Palestine Hospital	2 hospitals 640 records	2009	Measuring AE rate	53	3	213 (640 records/3 reviewers)	“Several training sessions”	640	14.2	0.89	a	NR
IHI Global Trigger Tool ⁴⁵	United States Hospital	3 hospitals 1,138 records	2005–2007	Examining inter-rater reliability	55	3	1,138 records per reviewer	NR	1,138	27	0.71 (0.68 - 0.74)	s	NR
IHI Global Trigger Tool ⁴⁶	United States Hospital	10 hospitals 2,400 records	2002–2007	Examining inter-rater reliability	54	20	596 records per reviewer	At least three hours	240	18.1 (16.4–19.9)	0.64	s	NR
Canadian Association of Paediatric Health Centres Trigger Tool (CPTT) ⁴⁷	Canada Hospital	6 hospitals 600 records	2005–2006	Examining inter-rater reliability	47	15	591 records per reviewer	Two days	60	15.1 (12.2–17.1)	0.34 (0.23 - 0.43)	f	82.7

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IHI Global Trigger Tool ³¹	United States Hospital	2 hospitals 65 records	NR	Examining inter-rater reliability	55	6	50 records per reviewer	Two hours	50	98 ^{‡‡} (49 AE/50 records)	0.85 (0.70-0.99)	a	93.9

IHI = Institute for Healthcare Improvement, NR = Not reported

‡ = NR: Estimated by calculation: sum of % agreement/number of reviewer teams

‡‡= NR: Estimated by calculation: proportion AE/number of patient records

Rating: f = fair (K: 0.21-0.40), m = moderate (K: 0.41-0.60), s = substantial (K: 0.61-0.80), a = almost perfect (K: 0.81-1.00)