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BACKGROUND

- Thousands of patients die each year from adverse events (AEs)
- Common methods for AE measurement include voluntary reporting systems, trigger tools, administrative data analysis, manual chart review and electronic data extraction
- A tailored subset of patient safety triggers and measures is needed to consistently and effectively measure harm in an actionable and patient focused way

OBJECTIVES

Generate a modern list of harms that could be used for 1) chart review to determine the current incidence of inpatient/outpatient AEs and 2) validate electronic tools that monitor for AEs in real time.

METHODS

- A modified World Café was held to conduct focused discussions on current safety monitoring metrics
- All triggers from the IHI trigger tool were included for expert review
- All National Quality Forum (NQF)-endorsed measures were considered, but those not directly related to patient safety, errors or AEs were excluded
- Other measures were included if requested by experts
- Participants were nominated by quality and safety leaders at seven Harvard-affiliated institutions
- 71 clinicians and quality & safety experts reviewed measures and triggers in 10 clinical domains (Table)

Clinical Domains	# Triggers	# Measures
1. Ambulatory	39	37
2. Care Transitions	5	66
3. Critical Care & DVT/PE	8	27
4. Diagnostic/General Inpatient	8	77
5. Infection Control	3	19
6. Medication/Allergies	40	16
7. Compliance/Regulatory	0	29
8. Nursing Sensitive Indicators	3	12
9. Perinatal/Maternal	9	46
10. Surgical/Registries	19	62
Total	134	391

- Measures/Triggers were rated for clinical importance, suitability for chart review, and suitability for electronic extraction (very low, low, medium, high, very high)

RESULTS

- 322 (61%) out of 525 total metrics were deemed of high or very high clinical importance (Figure 1)

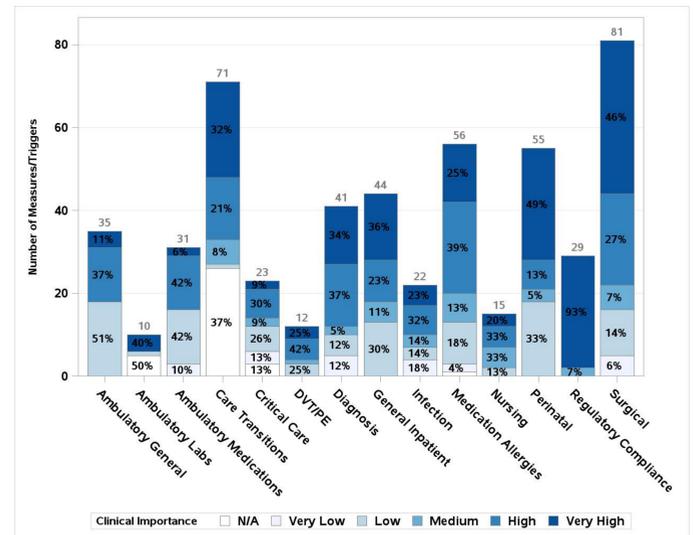


Figure 1. Metrics by clinical importance and clinical area 'N/A' refers to measures deemed repetitive or undesirable and were not scored

- 218 (68%) of the clinically important metrics were considered highly or very highly suitable for chart review (Figure 2)

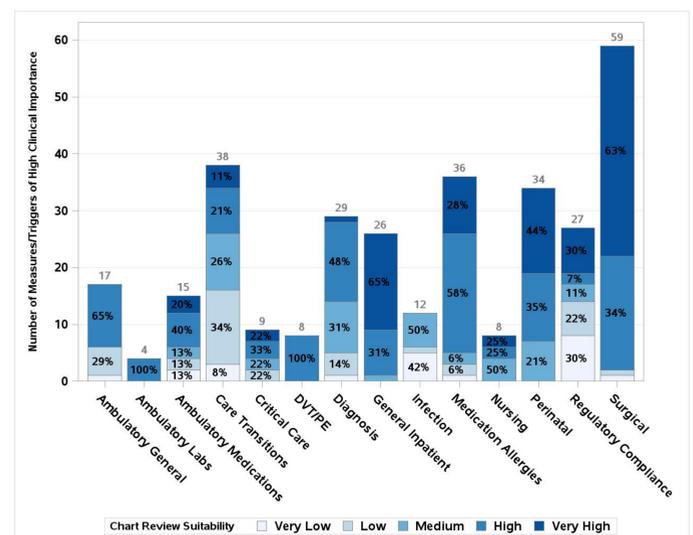


Figure 2. Chart review suitability of metrics of high clinical importance by clinical area

- 198 (62%) of the clinically important measures were considered highly or very highly suitable for electronic extraction (Figure 3)

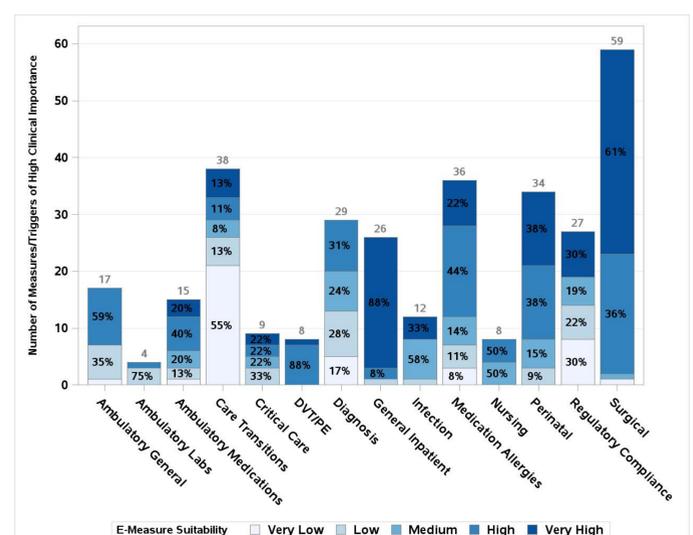


Figure 3. Electronic extraction suitability of metrics of high clinical importance by clinical area

NEXT STEPS

Our World Café event was part of a larger multi-site study called Safe Care, which aims to determine the current incidence of inpatient and outpatient adverse events, as well as develop operational approaches to facilitate the effective, efficient, accurate and timely measurement of harm. A future goal is to validate these measures using electronic surveillance mechanisms so as to minimize the need for chart review.