

Inter-Rater Reliability (IRR) Trigger Tool



Automated Data Validation Greatly Enhances Data Reliability

- Computer programming streamlines the validation process
- Enables all cases to be logically reviewed with preset checks, supporting the IRR process
- Increases data accuracy

Data reliability is imperative in determining quality improvement opportunities. The ACS defines that for participating hospitals to have reliable data, each center, if audited, should have a disagreement rate of <5% over all variables evaluated.

To streamline the IRR process and be more comprehensive in our review, we developed an automated tool that evaluates abstracted cases and flags potential errors for correction.

Sample Program Output

Case_ID	Data_Reason	Flag	Concern
1	Different Hospital_Admission_Date and Time_of_Presentation_Date	7	Potential Error Date mismatch
2	Different Hospital_Admission_Date and Time_of_Presentation_Date	8	Potential Error Date mismatch
3	CPT-24538 AND Laparoscopic_MS_Procedure not LAPAROSCOPIC/MIS ONLY	9	Error Surgical method incorrect
4	CPT-44970 AND Case_Status not Urgent	10	Potential Error Case priority incorrect
5	CPT-44970 AND Wound_Class=1	11	Error Wound Class discrepancy
6	CPT-24538 AND Laparoscopic_MS_Procedure not LAPAROSCOPIC/MIS ONLY	12	Error Surgical method incorrect
7	Different Hospital_Admission_Date and Time_of_Presentation_Date	13	Potential Error Date mismatch
8	Different Hospital_Admission_Date and Time_of_Presentation_Date	14	Potential Error Date mismatch
9	CPT-44970 AND Wound_Class=1	15	Error Wound Class discrepancy

Data Source/Population and Results

- Data Sources
 - Data Download Report (DDR)
 - Excel input files developed by our team (examples below)
 - CPT code and Wound Class discrepancy flag as error
 - Low WBC values by Age Group, with CPT code 44970, & wound class 4, but not SIRS, flag as potential error

Results/Methods

- SCR downloads the DDR from the ACS portal
- The program performs logical checks on the case data
- The output is a list of cases that are errors or potential errors and includes the reason each case is flagged
- The SCR updates the case data on the ACS portal

Lessons Learned

- Despite putting great care towards abstracting cases, errors are inevitable
- The trigger tool helps us validate our cases efficiently and identifies common types of errors
- We will add more logical checks as we enhance the tool
- The tool cannot catch all errors so we must remain vigilant in preventing errors and looking for them as we review cases