

Best Practices for Submission of Event Adjudication data



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Abstract

Due to lack of standard guideline for submission of event adjudication data from both standard development organizations and regulatory agencies, the pharmaceutical industry continues to face challenges of lacking standards and consistency for data collections and regulatory submissions. The PhUSE Optimizing the Use of Data Standards working group formed a sub-group including volunteers from FDA, CDISC, DCRI and industries to write a white paper to tackle this issue. This poster is prepared based on the draft white paper.

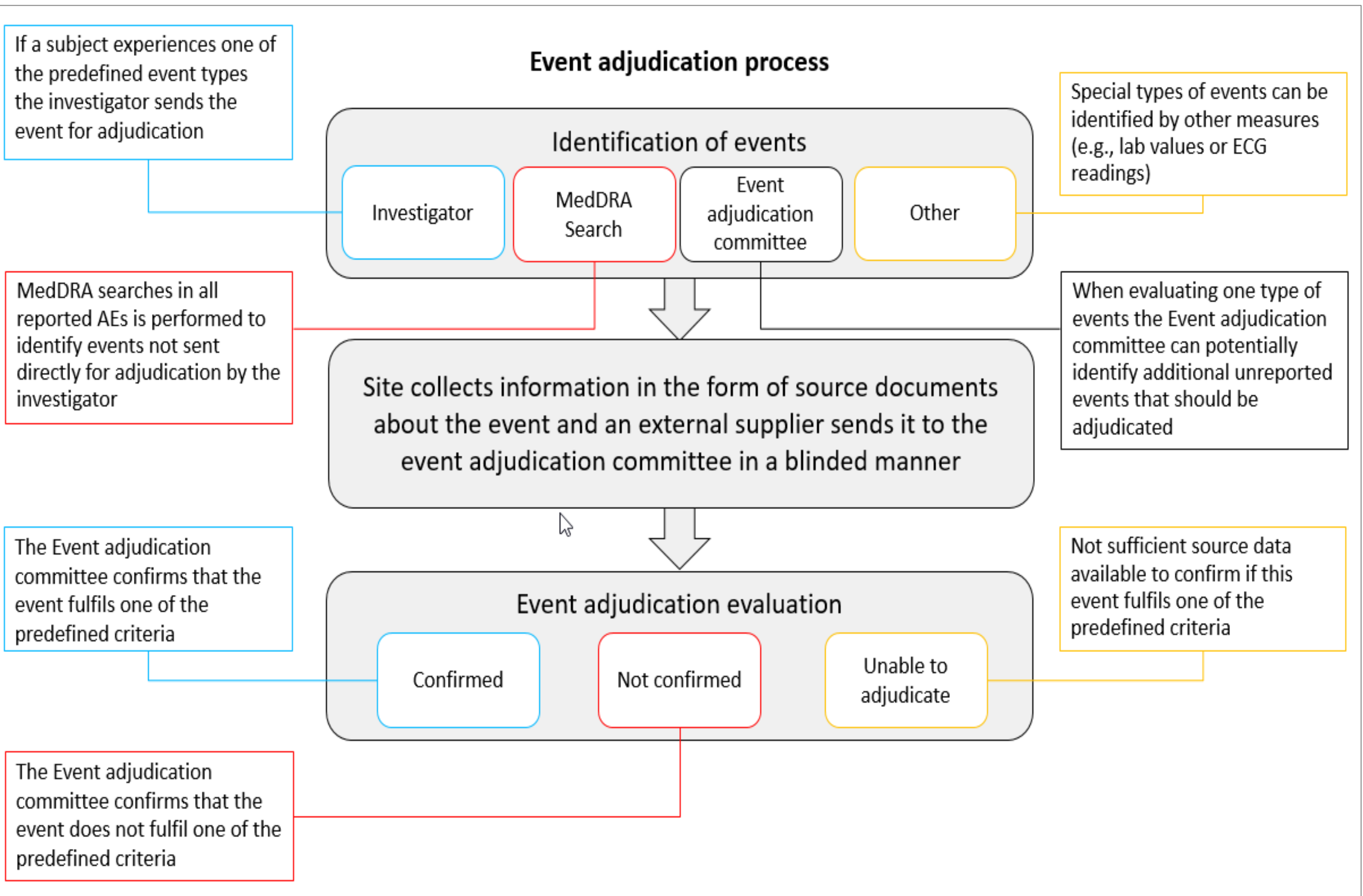
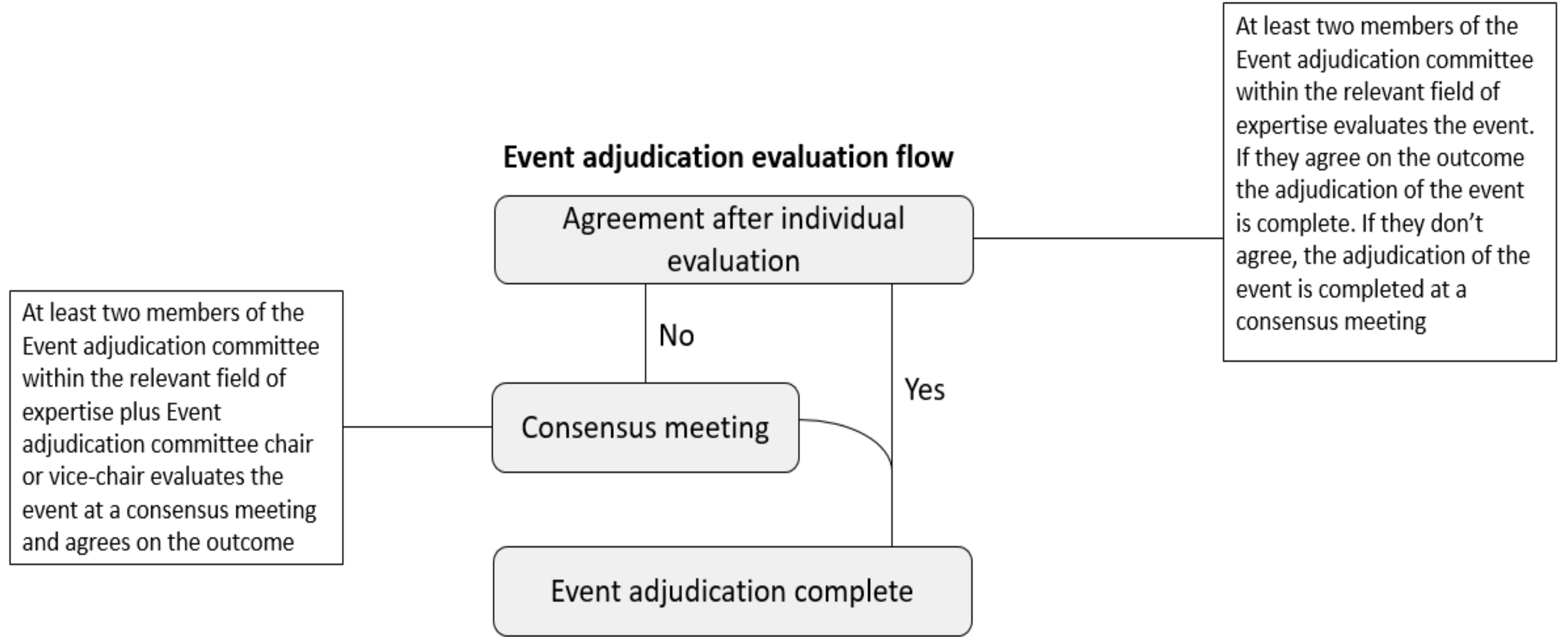
Scope

The PhUSE team mapped out the common practices and challenges for submission of Event adjudication data. The following questions are discussed:

1. Can the same data structure be generalized across therapeutic areas?
2. What level of detailed data should be submitted? Is it sufficient to submit only data points for the final outcome or should individual adjudicator's assessments be submitted as well?
3. How to present Investigator reported assessments and adjudicator assessments, so these are clearly differentiated and easily identifiable?
4. What should be standard structure of data set to ensure traceability of events and ease for reviewer?
5. Should data be submitted both in SDTM/ADaM? Is there any conformance, validation performed on event adjudication SDTM data?

Event Adjudication Process

In below diagram a generic example of the event adjudication process is depicted, describing how events are selected and then adjudicated against predefined diagnostic criteria.



SDTM Dataset of Adjudicated Data

Variables in the below example
--CAT: First adjudication/Re-adjudication
--EVALID: Adjudicator 1/Adjudicator 2/Adjudication committee
--EVAL: Adjudicator

--TESTCD	--TEST	--OBJ	--CAT	--ORRES	--EVALID	--ACPTH
SOURADEV	Source of adjudicated event	ACS	FIRST ADJUDICATION	INVESTIGATOR REPORTED	ADJUDICATOR 1	
ADJOUT	Adjudication outcome	ACS	FIRST ADJUDICATION	ACUTE MYOCARDIAL INFARCTION	ADJUDICATOR 1	
ADJDATE	Evaluated event onset date	ACS	FIRST ADJUDICATION	2017-01-01	ADJUDICATOR 1	
MITYPE	Type of myocardial infarction	ACS	FIRST ADJUDICATION	TYPE 1 MYOCARDIAL INFARCTION	ADJUDICATOR 1	
SOURADEV	Source of adjudicated event	ACS	FIRST ADJUDICATION	INVESTIGATOR REPORTED	ADJUDICATOR 2	
ADJOUT	Adjudication outcome	ACS	FIRST ADJUDICATION	ACUTE MYOCARDIAL INFARCTION	ADJUDICATOR 2	
ADJDATE	Evaluated event onset date	ACS	FIRST ADJUDICATION	2017-01-01	ADJUDICATOR 2	
MITYPE	Type of myocardial infarction	ACS	FIRST ADJUDICATION	TYPE 1 MYOCARDIAL INFARCTION	ADJUDICATOR 2	
READJRES	Re-adjudication reason	ACS	READJUDICATION	ADDITIONAL INFORMATION	ADJUDICATOR 1	
SOURADEV	Source of adjudicated event	ACS	READJUDICATION	INVESTIGATOR REPORTED	ADJUDICATOR 1	
ADJOUT	Adjudication outcome	ACS	READJUDICATION	UNSTABLE ANGENA	ADJUDICATOR 1	
ADJDATE	Evaluated event onset date	ACS	READJUDICATION	2017-01-01	ADJUDICATOR 1	
MITYPE	Type of myocardial infarction	ACS	READJUDICATION	TYPE 2 MYOCARDIAL INFARCTION	ADJUDICATOR 1	
READJRES	Re-adjudication reason	ACS	READJUDICATION	ADDITIONAL INFORMATION	ADJUDICATOR 2	
SOURADEV	Source of adjudicated event	ACS	READJUDICATION	INVESTIGATOR REPORTED	ADJUDICATOR 2	
ADJOUT	Adjudication outcome	ACS	READJUDICATION	ACUTE MYOCARDIAL INFARCTION	ADJUDICATOR 2	
ADJDATE	Evaluated event onset date	ACS	READJUDICATION	2017-01-03	ADJUDICATOR 2	
MITYPE	Type of myocardial infarction	ACS	READJUDICATION	TYPE 2 MYOCARDIAL INFARCTION	ADJUDICATOR 2	
READJRES	Re-adjudication reason	ACS	READJUDICATION	ADDITIONAL INFORMATION	ADJUDICATION COMMITTEE	Y
SOURADEV	Source of adjudicated event	ACS	READJUDICATION	INVESTIGATOR REPORTED	ADJUDICATION COMMITTEE	Y
ADJOUT	Adjudication outcome	ACS	READJUDICATION	ACUTE MYOCARDIAL INFARCTION	ADJUDICATION COMMITTEE	Y
ADJDATE	Evaluated event onset date	ACS	READJUDICATION	2017-01-01	ADJUDICATION COMMITTEE	Y
MITYPE	Type of myocardial infarction	ACS	READJUDICATION	TYPE 2 MYOCARDIAL INFARCTION	ADJUDICATION COMMITTEE	Y

How to present Investigator reported assessments and adjudicator assessments, so these are clearly differentiated and easily identifiable?
Both investigator's reported and adjudicator's assessments are submitted to authorities. Adjudication data does not replace or otherwise modify investigator reported data. Therefore, both sets of assessments should be differentiated and easily identifiable.
FDA Technical Conformance Guide states: 'Whenever adjudication data is provided it should be clearly identified so that the reviewer can distinguish the results of adjudication from data as originally collected.'
This can be interpreted that adjudication results should be reported in a standalone domain and investigator reported data is captured in other domains e.g. (AE, CE, FA) that can be linked with the adjudication results using the variable - -LNKID.

What should be standard structure of data set to ensure traceability of events and ease for reviewer?
It is recommended that the Adjudication CRF header be set up such that it contains the event identifiers from the investigator reported events, and that it captures the adjudicated outcome in the body of the Adjudication CRF. The setup should be made to achieve complete traceability from the adjudicated event to the trigger source event (investigator reported event, adverse event, lab value, etc.).
It is of utmost important for reviewer to understand the process adopted for Event adjudication and important details of data to be submitted hence it must be documented adequately. Amongst industry, standalone documents, such as adjudication charters, have been used to fulfill this purpose. However, now with the development of the cSDRG and ADRG it is recommended to have all details described in these documents. Adjudication charters can also be included as an appendix to these documents.

Should data be submitted both in SDTM/ADaM? Is there any conformance, validation performed on event adjudication SDTM data?
In general practice event adjudication data should be submitted in both SDTM & ADaM. However, authorities have previously accepted submitting data only in ADaM due to the processes used did not support generation of SDTM. For ADaM only, final assessments would be of interest as opposed to all assessments collected in SDTM. A flag should be populated, enabling selection of only final assessments as shown in the example.
FDA checks that data is in compliance with the processes defined in the charter and it undergoes usual validation as other finding domains.

Disclaimer:
Future CDISC publications that represent adjudication events may be different to this White Paper.

Recommendation:
Can the same data structure be generalized across therapeutic areas?
The therapeutic area should on a general level not affect the structure of the data. Same basic information should be present irrespective of the therapeutic area with the possibility for adding disease specific detailed assessments.
What level of detailed data should be submitted?
There are different approaches observed in the industry for submission of results from the adjudication process; some are submitting only final agreed assessment from the adjudicators and few are submitting individual adjudicators assessments from primary adjudication as well