Taxonomy Resource Definition

Taxonomy Release Version 5

Project Name: Learn From Patient Safety Events (LFPSE)

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1. Document Controls

1.1. Document Owner

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1.5. Version History

Version No.	Date	Revised by	Amended Section & Description of Change
V0.1	29/06/2021	Alykhan Esmail	Taxonomy 5 version of document
V0.2	6/08/2021	Ryland Karlovich	Minor Revisions
V0.3	6/10/2021	Ryland Karlovich	Removed reference to obsolete "DetectionFactors" property in section 25
V0.4	29/10/2021	Lauren Workman	Updates to event applicability column in Section 3, revision to mandatory patient age properties

2. Introduction and Purpose

The LFPSE data model, or "Taxonomy", comprises a set of FHIR resources which define all possible properties, or question responses, that are accepted in LFPSE. This document's purpose is to list all available properties in an accessible, readable format in a single location. As ever, the master definition of the Taxonomy continues to be comprised of the various FHIR profiles and extensions developed by LFPSE and available through the Taxonomy API. To assist developers integrating with LFPSE however, this guide brings the key information about the data properties and their relationships in a single location.

2.1 Layout of this Guide

An overview list of all allowed properties indicates their physical location within the FHIR profile-extension hierarchy. This also indicates which properties are mandatory for each type of submission, though the great variety of events means that a typical submission should also include additional properties which are relevant to the nature of the event (e.g. medications). Because of this variability some very important properties are not mandatory due to valid but unusual situations in which they may not apply, e.g. if the date of an incident is not known, but the properties should still be provided whenever possible.

Each extension is then addressed in turn which includes additional detail about the properties contained therein (e.g. data type, linked code system list if applicable). Further detail in this area clarifies the relationships between properties, i.e. if a given response to one property means that another related property should be answered as well. Example question text is also provided as an indication of how the question is asked in the LFPSE web system.

3. Overview of Taxonomy Properties

The list below documents all accepted properties in the LFPSE Taxonomy – release 5. This describes the location of each element within the FHIR resource hierarchy, including which extension the element belongs to, and which resource (profile) the extension extends. Default FHIR properties which are not on a LFPSE extension use "-" to indicate that they are directly on their parent resource.

The table also indicates which event type each property is applicable to – given the variability of events some properties are not applicable to all event types. Additionally, the absolute minimum acceptable submission is documented below via the "Mandatory in Submission" column. For a given event type, properties marked with "X" must always be provided with every submission. For brevity, the event types are abbreviated:

Incident: "I"Outcome: "O"Risk: "R"

Good Care: "G"

Note that a near miss is considered a type of incident.

A sortable Excel spreadsheet version of this table is provided in **Annex 1** (a separate document). The spreadsheet also provides a breakdown of Event Type into separate columns for each type (for filtering down to applicable properties for a given type) and a column referencing the validation rules that are applicable to each property (if any).

Property Id	FHIR Extension		Event Type	Mandatory in Submission				
				T	0	R	G	
date	-	AdverseEvent	I; O; R					
manufacturer	-	Device	1					
model	-	Device	I					
type	-	AdverseEvent	I; O; R; G	Х	Х	X	Х	
description	-	AdverseEvent	I; O; G	Х	Х		Х	
BuildingsInfrastructure	adverse-event-agent	AdverseEvent	1					
BuildingsInfrastructureOther	adverse-event-agent	AdverseEvent	I					
EstatesServices	adverse-event-agent	AdverseEvent	1					
EstatesServicesOther	adverse-event-agent	AdverseEvent	I					
DrugsInvolved	adverse-event-agent	AdverseEvent	1					
InvolvedAgents	adverse-event-agent	AdverseEvent	I	Х				
InvolvedPersonsActions	adverse-event-agent	AdverseEvent	1					
InvolvedPersonsActionsOther	adverse-event-agent	AdverseEvent	1					
DutyOfCandour	adverse-event-governance	AdverseEvent	I; O; R; G					
LevelOfConcern	adverse-event-classification	AdverseEvent	I; O; R	Х	Х			
DeviceType	adverse-event-device-details	Device	1					
DeviceTypeOther	adverse-event-device-details	Device	I					

ApproximateDate	adverse-event-estimated-date	AdverseEvent	I; O; R				
EstimatedTime	adverse-event-estimated-date	AdverseEvent	I; O				
IncidentOccurredToday	adverse-event-estimated-date	AdverseEvent	I; O; R	Х	Χ	Х	
PreciseTime	adverse-event-estimated-date	AdverseEvent	I; O				
TodaysDate	adverse-event-estimated-date	AdverseEvent	I; O; R				
PatientSafetyIncidentHasOccurred	adverse-event-classification	AdverseEvent	0		Χ		
ImmediateActions	adverse-event-outcome	AdverseEvent	1				
OutcomeType	adverse-event-outcome	AdverseEvent	0		Χ		
WentWell	adverse-event-outcome	AdverseEvent	I; O; R				
DeviceBrokenDetails	adverse-event-problem-devices	AdverseEvent	I				
DeviceInsufficientDetails	adverse-event-problem-devices	AdverseEvent	1				
DeviceInvolvementFactors	adverse-event-problem-devices	AdverseEvent	I				
DeviceUsedUnnecessarily	adverse-event-problem-devices	AdverseEvent	1				
DeviceWrongUsageDetails	adverse-event-problem-devices	AdverseEvent	1				
DrugInsufficientDetails	adverse-event-problem-medication	AdverseEvent	1				
DrugInvolvementFactors	adverse-event-problem-medication	AdverseEvent	I				
DrugReaction	adverse-event-problem-medication	AdverseEvent	1				
DrugReactionOther	adverse-event-problem-medication	AdverseEvent	I				
DrugUsedTooMuch	adverse-event-problem-medication	AdverseEvent	1				
InvolvedProcesses	adverse-event-problem-medication	AdverseEvent	I				
InvolvedProcessesOther	adverse-event-problem-medication	AdverseEvent	ſ				
ITSystemsInvolvementFactors	adverse-event-problem-it-systems	AdverseEvent	1				
MedicationAdministeredIncorrectly	adverse-event-problem-medication	AdverseEvent	1				
PeopleActionFactors	adverse-event-problem-people	AdverseEvent	I				
PeopleActionTooMuch	adverse-event-problem-people	AdverseEvent	ſ				
PeopleInsufficientActionDetails	adverse-event-problem-people	AdverseEvent	ı				
PeopleInvolvementFactors	adverse-event-problem-people	AdverseEvent	1				
PeopleOmittedActionDetails	adverse-event-problem-people	AdverseEvent	I				
PeopleUnavailableDetails	adverse-event-problem-people	AdverseEvent	ſ				
PeopleWrongActionDetails	adverse-event-problem-people	AdverseEvent	I				
ProblemDescriptionActions	adverse-event-problem-people	AdverseEvent	1				
ProblemDescriptionDevices	adverse-event-problem-devices	AdverseEvent	1				
ProblemDescriptionDrugs	adverse-event-problem-medication	AdverseEvent	1				
ProblemDescriptionInvolvement	adverse-event-problem-people	AdverseEvent	1				
ProblemDescriptionSystemsSoftware	adverse-event-problem-it-systems	AdverseEvent	1				
ProblemDescriptionTissuesOrgans	adverse-event-problem-tissues-	AdverseEvent	I				
·	organs						
ProblemMedicationPackaging	adverse-event-problem-medication	AdverseEvent	1				
TissueOrgansInsufficientDetails	adverse-event-problem-tissues- organs	AdverseEvent	I				
TissueOrgansInvolvementFactors	adverse-event-problem-tissues- organs	AdverseEvent	I				
TissueOrgansNotUsed	adverse-event-problem-tissues- organs	AdverseEvent	I				
TissueOrgansUsedTooMuch	adverse-event-problem-tissues- organs	AdverseEvent	I				
TissueOrgansWrongDetails	adverse-event-problem-tissues- organs	AdverseEvent	I				
TissuesOrgansDamagedDetails	adverse-event-problem-tissues- organs	AdverseEvent	I				

Process	adverse-event-process	AdverseEvent	I				
DataSharingOptOut	adverse-event-reference-metadata	AdverseEvent	I; O; R; G	Х	Х	X	Х
FromOnlineForms	adverse-event-reference-metadata	AdverseEvent	I; O; R; G				
IsAnonymous	adverse-event-reference-metadata	AdverseEvent	I; O; R; G				
ReferenceNumber	adverse-event-reference-metadata	AdverseEvent	I; O; R; G				
RiskDescription	adverse-event-risk-details	AdverseEvent	R			X	
RiskImminent	adverse-event-risk-details	AdverseEvent	I; R			X	
RiskPopulation	adverse-event-risk-details	AdverseEvent	I; R				
RiskServiceArea	adverse-event-risk-details	AdverseEvent	R				
RiskTheme	adverse-event-risk-details	AdverseEvent	R				
RiskThemeOther	adverse-event-risk-details	AdverseEvent	R				
RiskTimeframe	adverse-event-risk-details	AdverseEvent	R				
RiskTimeframeOther	adverse-event-risk-details	AdverseEvent	R				
RadiotherapyIncidentCode	adverse-event-safety-challenges	AdverseEvent	1				
SafetyChallenges	adverse-event-safety-challenges	AdverseEvent	I	Х			
GoodCareDetectionFactor	adverse-event-went-well	AdverseEvent	G				
${\sf GoodCareDetectionFactorOther}$	adverse-event-went-well	AdverseEvent	G				
HowFutureOccurrence	adverse-event-went-well	AdverseEvent	G				Х
StrengthsOfCare	adverse-event-went-well	AdverseEvent	G				
DetectionPoint	detection-factors	AdverseEvent	I; O		Х		
DetectionPointOther	detection-factors	AdverseEvent	I; O				
IdentifiedLocation	location-details	Location	R				
IdentifiedLocationOther	location-details	Location	R				
LocationAtRisk	location-details	Location	R				
LocationKnown	location-details	Location	I; O; G	Х	Х		
LocationWithinService	location-details	Location	I; O	Х			
Organisation	location-details	Location	I; O; R; G				
OrganisationOther	location-details	Location	I; O; R; G				
ResponsibleSpecialty	location-details	Location	I; O; R	Х		Х	
ResponsibleSpecialtyOther	location-details	Location	I; O; R				
RiskIdentifiedLocation	location-details	Location	R				
ServiceArea	location-details	Location	I; O	Х			
MedicationAdministration	adverse-event-agent	AdverseEvent	I				
AgeAtTimeOfIncidentDays	patient-information	Patient	I; O				
AgeBracket	patient-information	Patient	I; O				
ClinicalOutcome	patient-information	Patient	I	Х			
Gender	patient-information	Patient	I; O				
PatientSequence	patient-information	Patient	I; O	Х	Х		
PhysicalHarm	patient-information	Patient	I	Х			
PsychologicalHarm	patient-information	Patient	I				
StrengthOfAssociation	patient-information	Patient	ı				
ReporterContact	practitioner-details	Practitioner	1				
ReporterInvolvement	practitioner-details	Practitioner	ı				
ReporterInvolvementOther	practitioner-details	Practitioner	1				
ReporterOrganisation	practitioner-details	Practitioner	I; O; R; G				
ReporterOrganisationOther	practitioner-details	Practitioner	I; O; R				
ReporterRole	practitioner-details	Practitioner	I; O; R; G				

ReporterRoleOther	practitioner-details	Practitioner	I; O; R; G	
ReporterType	practitioner-details	Practitioner	I; O; R; G	
ReporterTypeOther	practitioner-details	Practitioner	I; O; R	
WhyAnonymous	practitioner-details	Practitioner	I; O; R	
WhyAnonymousOther	practitioner-details	Practitioner	I; O; R	
DesignationsMentalHealth	adverse-event-governance	AdverseEvent	I; O; R; G	
DeprivationOfLiberty	adverse-event-governance	AdverseEvent	I; O; R; G	
CqcNotify	adverse-event-governance	AdverseEvent	I; O; R; G	
CqcCriteria	adverse-event-governance	AdverseEvent	I; O; R; G	
LocalAuthoritySafeguarding	adverse-event-governance	AdverseEvent	I; O; R; G	
NeverEvent	adverse-event-governance	AdverseEvent	I; O; R; G	
SeriousIncident	adverse-event-governance	AdverseEvent	I; O; R; G	
HsibNotify	adverse-event-governance	AdverseEvent	I; O; R; G	
NeverEventType	adverse-event-governance	AdverseEvent	I; O; R; G	
PatientEthnicity	patient-information	Patient	I; O	
BuildingsInfrastructureInvolved	adverse-event-problem-buildings- infrastructure	AdverseEvent	1	
BuildingsInfrastructureNotUsed	adverse-event-problem-buildings- infrastructure	AdverseEvent	1	
WrongBuildingsInfrastructure	adverse-event-problem-buildings- infrastructure	AdverseEvent	1	
BuildingsInfrastructureProblem	adverse-event-problem-buildings- infrastructure	AdverseEvent	1	
EstatesServicesInvolved	adverse-event-problem-estates- services	AdverseEvent	I	
EstatesServicesNotUsed	adverse-event-problem-estates- services	AdverseEvent	1	
WrongEstatesServices	adverse-event-problem-estates- services	AdverseEvent	I	
EstatesServicesProblem	adverse-event-problem-estates- services	AdverseEvent	I	
BloodInvolved	adverse-event-problem-blood	AdverseEvent	I	
TooMuchBloodUsed	adverse-event-problem-blood	AdverseEvent	1	
TooLittleBloodUsed	adverse-event-problem-blood	AdverseEvent	1	
WrongBlood	adverse-event-problem-blood	AdverseEvent	1	
BloodWasNotUsed	adverse-event-problem-blood	AdverseEvent	I	
DamagedBlood	adverse-event-problem-blood	AdverseEvent	1	
BloodProductsInvolved	adverse-event-problem-blood- products	AdverseEvent	1	
TooMuchBloodProducts	adverse-event-problem-blood- products	AdverseEvent	1	
TooLittleBloodProducts	adverse-event-problem-blood- products	AdverseEvent	1	
WrongBloodProducts	adverse-event-problem-blood- products	AdverseEvent	1	
BloodProductsNotUsed	adverse-event-problem-blood- products	AdverseEvent	1	
DamagedBloodProducts	adverse-event-problem-blood- products	AdverseEvent	1	
MarvinReferenceNumber	adverse-event-safety-challenges	AdverseEvent	1	
BloodProblem	adverse-event-problem-blood	AdverseEvent	1	

BloodProductsDetails	adverse-event-problem-blood- products	AdverseEvent	I		
BloodProductsBrand	adverse-event-problem-blood- products	AdverseEvent	I		
BloodProductsBatch	adverse-event-problem-blood- products	AdverseEvent	I		
YellowCardReference	adverse-event-agent	AdverseEvent	1		
SabreReportNumber	adverse-event-agent	AdverseEvent	I		
ShotReportNumber	adverse-event-agent	AdverseEvent	I		
NhsbtReportNumber	adverse-event-agent	AdverseEvent	I		

4. Explanation of Further Sections

The remaining sections in this document break down all properties by extension. A consistent set of information is defined for each. At the extension level this includes the FHIR profile that the extension extends, and the event types that the extension is applicable to.

At the property level, the following information is documented:

- Property Id: the unique id of the property, which form its URL reference within the extension
- Data Type: the data format accepted for the property (submission rejected for non-matching formats), which is one of:
 - o Date value must be parse-able as a full or partial date
 - String free text
 - o Code a coded representation of a LFPSE list lookup value
 - Boolean true/false
 - Integer whole number
- Linked Taxonomy: for "code" data type properties, the name of the LFPSE CodeSystem list which defines the accepted code response choices
- Max: the maximum number of occurrences of the property allowed in a submission (some questions could have multiple responses, e.g. multiple service areas being involved)
- Dependencies: documents what properties are dependent on a given response to the property
 - Applicable: a given response to the property makes one or more additional properties applicable, e.g. if "Devices" is given in response to "InvolvedAgents", then additional properties specific to Devices are applicable to the submission.
 - Required: as per Applicable, but the properties specified are mandatory to be provided in the submission.
 - o These are set up as per the example:

Required: Required/Applicable – defines the strength of the relationships

- SomeResponseChoice (A): SomePropertyId
- SomeOtherResponseChoice (B) : SomeOtherPropertyId

Applicable:

AnotherResponse (C): AnotherPropertyId

Response display text (Code value): Triggered property id

 Note that the response text may be shortened in this document for brevity. If "SomeResponseChoice" is selected as the response, then the "SomePropertyId" property **must** be answered as well in the submission.

If "AnotherResponse" is selected as the response, then "AnotherPropertyId" property **should** be answered as well in the submission

 Example Question Text: An example of the question for the property is phrased in the LFPSE web forms

5. Default Properties

There are several properties used in LFPSE that exist by default on the FHIR profiles that LFPSE extends. These are described below, with an indication of which profile they belong to given they belong to no extension.

Property Id	Profile	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
date	AdverseEvent	date		1		Incident: "What was the date of the incident?" Risk: "What date was the risk identified on?" Outcome: "What was the date of the outcome?"
manufacturer	Device	string		1		Who manufactured the device?
model	Device	string		1		What was the model or serial number of the device?
type	AdverseEvent	code	Event Type	1	 Required: Incident (1): All properties marked "Mandatory in Submission" for Incident (I) in Section 3 Outcome (2): All properties marked "Mandatory in Submission" for Outcome (O) in Section 3 Risk (3): All properties marked "Mandatory in Submission" for Risk (R) in Section 3 Good Care (4): All properties marked "Mandatory in Submission" for Good Care (G) in Section 3 	What kind of event do you want to record?
description	AdverseEvent	string		1		Describe what happened

6. Extension "adverse-event-agent"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
DrugsInvolved	string		100		Which medicines were involved in what went wrong?
InvolvedAgents	code	Agent Type	100	 Applicable: Medications (4): DrugsInvolved, InvolvedProcesses, DrugReaction, MedicationAdministration, DrugInvolvementFactors, ReporterContact Devices (3): DeviceType, manufacturer, model, DrugReaction, MedicationAdministration, DeviceInvolvementFactors, ReporterContact IT Systems or Software (9): ITSystemsInvolvementFactors, ReporterContact Buildings or Infrastructure (13): BuildingsInfrastructure, BuildingsInfrastructure, BuildingsInfrastructureInvolved Estates Services (14): EstatesServices, EstatesServicesInvolved Blood (11): SabreReportNumber, ShotReportNumber, BloodInvolved Blood products (12): BloodProductsDetails, BloodProductsBrand, BloodProductsBrand, BloodProductsInvolved, ReporterContact 	Which things were involved in what went wrong?

				 Tissues or Organs for transplant (8): NhsbtReportNumber, TissueOrgansInvolvementFactors None of the above (10): InvolvedPersonsActions, PeopleActionFactors 	
InvolvedPersonsActions	code	Human Agents	100	Required: Other (5): InvolvedPersonsActionsOther	Which people's actions differed from what was expected or intended?
InvolvedPersonsActionsOther	string		1		Please specify
MedicationAdministration	code	Yes-No-Unknown Codes	1	Applicable: Yes: DrugInvolvementFactors, DeviceInvolvementFactors	Was a device used to give medication in this instance?
BuildingsInfrastructure	code	Buildings or Infrastructure	100	Required: Other (16): BuildingsInfrastructureOther	Which of the following were involved?
BuildingsInfrastructureOther	string		1		Please specify
EstatesServices	code	Estates services	100	Required: Other (9): EstatesServicesOther	Which of the following were involved?
EstatesServicesOther	string		1		Please specify
SabreReportNumber	string		1		SABRE report numbers (for blood incidents)
ShotReportNumber	string		1		SHOT report numbers (for blood incidents)
NhsbtReportNumber	string		1		NHSBT report numbers
YellowCardReference	string		1		If you have already reported this event to the Yellow Card scheme, please include your reference number here:

7. Extension "adverse-event-classification"

Parent Profile:

AdverseEvent

- Incident
- Outcome
- Risk

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
LevelOfConcern	code	Worry Scale	1		Incident: "How concerned are you about this incident and its implications?" Risk: "How concerned are you about this risk and its implications?" Outcome: "How concerned are you about this outcome and its implications?"
PatientSafetyIncidentHasOccurred	code	Yes-No-Unknown Codes	1	Required (Outcome): Yes (y): type (change from Outcome to Incident), accordingly all mandatory Incident properties become required	Is there anything in what you know at this point that makes you worry or suspect that a patient safety incident has occurred?

8. Extension "adverse-event-device-details"

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Device

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
DeviceType	code	Device Type	100	Required: • Other (88): DeviceTypeOther	What kind of medical device was involved in what went wrong?
DeviceTypeOther	string		1		Please specify

9. Extension "adverse-event-estimated-date"

Parent Profile:

AdverseEvent

- Incident
- Outcome
- Risk

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
ApproximateDate	string		1		Incident: "When do you think the incident happened?" Outcome: "When do you think the outcome happened?" Risk: "When do you think the risk was identified?"
EstimatedTime	code	Time of Incident Brackets	1		Do you think any of the below were relevant to the incident occurring?
IncidentOccurredToday	code	Yes-No-Unknown Codes	1	Required: • Yes (y): TodaysDate, date (can be derived in this instance, both the same value) • No (n): date Applicable: • I don't Know (u): ApproximateDate	Incident: "Did the incident happen today?" Risk: "Was the risk identified today?" Outcome: "Did this happen today?"
PreciseTime	time		1	Applicable: • [No response]: EstimatedTime	Approximately what time did the incident happen?
TodaysDate	date		1		What is today's date?

10. Extension "adverse-event-outcome"

Parent Profile:

AdverseEvent

- Incident
- Outcome
- Risk

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
ImmediateActions	string		1		What was done immediately to reduce harm caused by the incident?
OutcomeType	code	Outcome Type	100		Which of the following are you recording?
WentWell	string		1		Do you have any ideas for what could be done to reduce the risk or impact of this happening again?

11. Extension "adverse-event-problem-devices"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
DeviceBrokenDetails	code	Device Broken	10		What was wrong with the device?
DeviceInsufficientDetails	code	Devices insufficient	10		How was the device not used when it should have been?
DeviceInvolvementFactors	code	Devices involved	10	Applicable: The device was used when it should not have been (1): DeviceUsedUnnecessarily The device was not used when it should have been (2): DeviceInsufficientDetails The device was used incorrectly (3): DeviceWrongUsageDetails The device was available but broken (4): DeviceBrokenDetails Other (6): ProblemDescriptionDevices	How was the device involved in what went wrong?
DeviceUsedUnnecessarily	code	Device used unnecessarily	10		How was the device used when it should not have been?
DeviceWrongUsageDetails	code	Device used wrongly	10		How was the device used incorrectly?
ProblemDescriptionDevices	string		1		What was the problem with devices?

12. Extension "adverse-event-problem-medication"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
DrugInsufficientDetails	code	Too little drug	10		How was too little medication prescribed/dispensed/administered?
DrugInvolvementFactors	code	Drugs involved	10	Applicable: Too much medication(1): DrugUsedTooMuch Too little medication (2): DrugInsufficientDetails The medication was prescribed/dispensed/administered incorrectly (3): MedicationAdministeredIncorrectly Something was wrong with the medication (4): ProblemMedicationPackaging Other (5): ProblemDescriptionDrugs	How was medication involved in what went wrong?
DrugReaction	code	Yellow Card Criteria	10	Required: Other (8): DrugReactionOther	Do you think this incident involved any of these problems with medicines or medical devices?
DrugReactionOther	string		1		Please specify
DrugUsedTooMuch	code	Too much drug	10		How was too much medication prescribed/dispensed/administered?
InvolvedProcesses	code	Involved Processes	10	Required: Other (4): InvolvedProcessesOther	Which of the following processes were involved in what went wrong?
InvolvedProcessesOther	string		1		Please specify
MedicationAdministeredIncorrectly	code	Medication Administered Incorrectly	10		How was the medication prescribed/dispensed/administered incorrectly?
ProblemDescriptionDrugs	string		1		What was the problem with the medication?

ProblemMedicationPackaging	code	Problem Medication or Packaging	10	What was wrong with the medication and/or
				its packaging?

13. Extension "adverse-event-problem-it-systems"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
ITSystemsInvolvementFactors	code	IT systems and software involved	10	Applicable: • Other (6):	How were IT systems or software involved in what went wrong?
				ProblemDescriptionSystemsSoftware	-
ProblemDescriptionSystemsSoftware	string		1		What was the problem with IT systems or
					software?

14. Extension "adverse-event-problem-people"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
PeopleActionFactors	code	People Actions	10	 Applicable: People did too much of something (1): PeopleActionTooMuch People did too little of something (2): PeopleInsufficientActionDetails People did one thing when they meant to do another (3): PeopleWrongActionDetails People did not do something they should have (4): PeopleOmittedActionDetails 	How did people's actions differ from what was expected or intended?
PeopleActionTooMuch	code	People action too much	10		How did people do something too much?
PeopleInsufficientActionDetails	code	People not enough action	10		How did people do something too little?
PeopleInvolvementFactors	code	People Involvement	10	Applicable: There were people absent who were required (2): PeopleUnavailableDetails Other (4): ProblemDescriptionInvolvement	How was people's availability involved in what went wrong?
PeopleOmittedActionDetails	code	People did not do something	10		Why wasn't the right action taken?
PeopleUnavailableDetails	code	People unavailable	10		Why were required people absent?
PeopleWrongActionDetails	code	People wrong action	10		How did the wrong action get taken?
ProblemDescriptionActions	string		1		How were actions or behaviours involved in what went wrong?
ProblemDescriptionInvolvement	string		1		What was the problem with people's involvement or availability?

15. Extension "adverse-event-problem-tissues-organs"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
ProblemDescriptionTissuesOrgans	string		1		What was the problem with tissues or organs for transplant?
TissueOrgansInsufficientDetails	code	Way insufficient tissues or organs	10		How were too few/little tissues or organs for transplant used?
TissueOrgansInvolvementFactors	code	Tissue and organs for transplant involved	10	 Applicable: Too much/many tissues or organs for transplant (1):	How were tissue or organs for transplant involved in what went wrong?
TissueOrgansNotUsed	code	Tissue Organs Not Used	10		Why were tissues or organs for transplant not used when they should have been?
TissueOrgansUsedTooMuch	code	Too much tissue and organs	10		How were too much/many tissues or organs for transplant used?
TissueOrgansWrongDetails	code	Incorrect tissues or organs for transplant	10		How were the wrong tissues or organs for transplant used?
TissuesOrgansDamagedDetails	code	Damaged tissues or organs from transplant	10		How were tissues or organs for transplant available but damaged or unfit for use?

16. Extension "adverse-event-problem-buildings-infrastructure"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
BuildingsInfrastructureInvolved	code	Buildings or Infrastructure Involved	100	Applicable: • Buildings or infrastructure were not used or present when they should have been (2): BuildingsInfrastructureNotUsed • The wrong buildings or infrastructure were used or present (3): WrongBuildingsInfrastructure • Other (5): BuildingsInfrastructureProblem	How were buildings or infrastructure involved in what went wrong?
BuildingsInfrastructureNotUsed	code	Buildings or Infrastructure Not Used	100		Why were the correct buildings or infrastructure not used?
WrongBuildingsInfrastructure	code	Wrong Buildings or Infrastructure	100		How were the wrong buildings or infrastructure involved?
BuildingsInfrastructureProblem	string		1		What was the problem with buildings or infrastructure?

17. Extension "adverse-event-problem-estates-services"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
EstatesServicesInvolved	code	Estates Services Involved	100	Applicable: • Estates services were not used or present when they should have been (2): EstatesServicesNotUsed • The wrong estates services were used or present (3): WrongEstatesServices • Other (5): EstatesServicesProblem	How were estates services involved in what went wrong?
EstatesServicesNotUsed	code	Estates Services Not Used	100		Why were the correct estates services not used?
WrongEstatesServices	code	Wrong Estates Services	100		How were the wrong estates services involved?
EstatesServicesProblem	string		1		What was the problem with estates services?

18. Extension "adverse-event-problem-blood"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
BloodInvolved	code	Blood Involved	100	Applicable: Too much blood was used (1): TooMuchBloodUsed Too little blood was used (2): TooLittleBloodUsed The wrong blood was used in place of the correct blood (3): WrongBlood Blood was not used when it should have been (4): BloodWasNotUsed Blood was available but damaged or not fit for use (5): DamagedBlood Other (6): BloodProblem	How was blood involved in what went wrong?
TooMuchBloodUsed	code	Too Much Blood Used	100		How was too much blood used?
TooLittleBloodUsed	code	Too Little Blood Used	100		How was too little blood used?
WrongBlood	code	Wrong Blood	100		How was the wrong blood used?
BloodWasNotUsed	code	Blood Was Not Used	100		Why was blood not used when it should have been?
DamagedBlood	code	Blood Damaged	100		How was blood damaged or not fit for use?
BloodProblem	string		1		What was the problem with the blood?

19. Extension "adverse-event-problem-blood-products"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
BloodProductsDetails	string		1		Which blood products were involved?
BloodProductsBrand	string		1		What was the brand of the blood product involved?
BloodProductsBatch	string		1		What was the batch number of the blood product involved?
BloodProductsInvolved	code	Blood Products Involved	100	Applicable: Too great an amount of blood products were used (1): TooMuchBloodProducts Too small an amount of blood products were used (2): TooLittleBloodProducts The wrong blood products were used in place of the correct ones (3): WrongBloodProducts Blood products were not used when they should have been (4): BloodProductsNotUsed Blood products were available but damaged or not fit for use (5): DamagedBloodProducts Other (6): BloodProductsProblem	How were blood products involved in what went wrong?
TooMuchBloodProducts	code	Too Much Blood Products	100		How were too great an amount of blood products used?
TooLittleBloodProducts	code	Too Little Blood Products	100		How were too small an amount of blood products used?
WrongBloodProducts	code	Wrong Blood Products	100		How were the wrong blood products used?
BloodProductsNotUsed	code	Blood Products Not Used	100		Why were blood products not used when they should have been?

DamagedBloodProducts	code	Blood Products Damaged	100	How were blood products damaged or not fit for use?
BloodProductsProblem	string		1	What was the problem with the blood products?

20. Extension "adverse-event-process"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
Process	code	Healthcare Process	1		What was being done when the incident
					happened?

21. Extension "adverse-event-reference-metadata"

Parent Profile:

AdverseEvent

Applicable Event Types:

- Incident
- Outcome
- Risk
- Good Care

This is a metadata extension used by the LFPSE APIs for data management purposes. Only the "DataSharingOptOut" property will be accepted from a submission; the other properties are set internally by the API.

Property Id	Data Type	Linked Taxonomy Max	Dependencies	Example Question Text
DataSharingOptOut	boolean			Data sharing out-out
FromOnlineForms	boolean			Origin
IsAnonymous	boolean			Anonymity Status
ReferenceNumber	string			Reference Number

22. Extension "adverse-event-risk-details"

Parent Profile:

AdverseEvent

- Incident (RiskImminent property, only when the Incident does not involve any patients)
- Risk

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
RiskDescription	string		1		Describe the risk
RiskImminent	code	Yes-No-Unknown Codes	1	Applicable: No (n): RiskTimeframe I don't know (u): RiskTimeframe	Is there imminent risk of severe harm or death?
RiskPopulation	string		1		Which groups of patients are at risk?
RiskServiceArea	code	Service Type	100		Which service areas are at risk?
RiskTheme	code	Risk Themes	100	Required: • Other (8): RiskThemeOther	What type of risk to patient safety are you recording?
RiskThemeOther	string		1		Please specify
RiskTimeframe	code	Risk Timeframes	1	Required: Other (4): RiskTimeframeOther	When do you think this risk will cause harm?
RiskTimeframeOther	string		1		Please specify

23. Extension "adverse-event-safety-challenges"

Parent Profile:

AdverseEvent

Applicable Event Types:

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
RadiotherapyIncidentCode	string		1		What is the radiotherapy incident code?
SafetyChallenges	code	Safety Challenges	100	Required: Radiotherapy incident (4): RadiotherapyIncidentCode Screening services incident (7): MarvinReferenceNumber	Does the incident appear to relate to any of these known safety challenges?
MarvinReferenceNumber	string		1		Marvin reference number

24. Extension "adverse-event-went-well"

Parent Profile:

AdverseEvent

Applicable Event Types:

Good Care

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
GoodCareDetectionFactor	code	Reporter relationship to event	1	Required: Other (6): GoodCareDetectionFactorOther	How did this example of good practice come to your attention?
GoodCareDetectionFactorOther	string		1		Please specify
HowFutureOccurrence	string		1		How could this excellence be amplified or recreated in the future?
StrengthsOfCare	string		1		What were the strengths of care or service delivery or points at which something went particularly well in the care of the patient?

25. Extension "detection-factors"

Parent Profile:

AdverseEvent

- Incident
- Outcome

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
DetectionPoint	code	Detection points	1	Required:	Incident: At what point was the incident
				Other (8): DetectionPointOther	detected? Outcome: At what point was the outcome
					detected?
DetectionPointOther	string		1		Please specify

26. Extension "adverse-event-governance"

Parent Profile:

AdverseEvent

- Incident
- Outcome
- Risk
- Good Care

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
DutyOfCandour	boolean		1		Does this qualify as a notifiable safety incident under the Duty of Candour regulations?
DesignationsMentalHealth	boolean		1		Was the service user detained under the Mental Health Act at the time of the event?
DeprivationOfLiberty	boolean		1		Was the service user subject to Deprivation of Liberty Safeguards at the time of the event?
CqcNotify	boolean		1	Applicable: "Yes" (true): CqcCriteria	Does this event require statutory notification to CQC?
CqcCriteria	code	CQC Criteria	100	Applicable: "Death of a service user" (1): DesignationsMentalHealth, DeprivationOfLiberty "Abuse or allegations of abuse" (3): LocalAuthoritySafeguarding	Which of the following criteria does it meet?
LocalAuthoritySafeguarding	boolean		1		Has this been referred to the Local Authority Safeguarding team?
NeverEvent	boolean		1	Applicable: "Yes" (true): NeverEventType	Does this event meet the national definition of a Never Event?
SeriousIncident	boolean		1		Does this event meet the national definition of a Serious Incident?
HsibNotify	boolean		1		Does this incident relate to a baby and/or mother and require notification to HSIB under the defined criteria for maternity investigations?
NeverEventType	code	Never Event Type	1		Which Never Event type are you declaring?

27. Extension "location-details"

Parent Profile:

Location

- Incident
- Outcome
- Risk

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
IdentifiedLocation	code	ODS Codes	1	Applicable: • [No response]: IdentifiedLocationOther	Which organisation was the risk identified in?
IdentifiedLocationOther	string		1		Please specify
LocationAtRisk	code	Risk location	1	 Applicable: My organisation (1): Organisation A different organisation (2):	Where does the risk exist?
LocationKnown	code	Yes-No-Unknown Codes	1	Yes (y): Organisation	Incident: "Did the incident happen in your organisation?" Outcome: "Did the outcome happen in your organisation?"
LocationWithinService	code	Incident Location	1		Incident: "Where did the incident happen?" Outcome: "Where did the outcome happen?"
Organisation	code	ODS Codes	100	[No response]: OrganisationOther	Risk: "Which organisation does the risk relate to?" Incident: "Which organisation did the incident happen in?" Outcome: "Which organisation did the outcome happen in?"
OrganisationOther	string		1		Please specify
ResponsibleSpecialty	code	Specialty	1	 [No response]: ResponsibleSpecialtyOther 	Incident: Which specialty does the incident relate to? Outcome: Which specialty does the outcome relate to? Risk: Which specialty does the risk relate to?
ResponsibleSpecialtyOther	string		1		Please specify

RiskIdentifiedLocation	code	Location	100	Applicable: My organisation (1): IdentifiedLocation A different organisation (2): IdentifiedLocation	Where was the risk identified?
ServiceArea	code	Service Type	100		Incident/Outcome: "Which service areas were involved?" Risk: "Which service areas are at risk?"

28. Extension "patient-information"

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Patient

Applicable Event Types:

- Incident
- Outcome

*Note that this extension can be added multiple times (up to a limit of 100) if multiple patients were involved in an incident.

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
AgeAtTimeOfIncidentDays	integer		1		What was the patient's age at the time of the event?
AgeBracket	code	Age Brackets	1		Estimate the patient's age
ClinicalOutcome	string		1		What was the clinical outcome for the patient?
Gender	code	Gender	1		What is the patient's sex?
PatientSequence	integer		1		PatientSequence
PhysicalHarm	code	Level of Physical Harm	1	Required: • Any non-fatal (1) response: PsychologicalHarm Applicable: • Moderate (3): StrengthOfAssociation, ImmediateActions • Severe (2): StrengthOfAssociation, ImmediateActions • Fatal (1): StrengthOfAssociation, ImmediateActions	To what extent was the patient physically harmed (including pain) in this incident?
PsychologicalHarm	code	Level of Psychological Harm	1	 Applicable: Moderate (2): StrengthOfAssociation, ImmediateActions Severe (1): StrengthOfAssociation, ImmediateActions 	To what extent was the patient psychologically harmed in this incident?
StrengthOfAssociation	code	Strength of Association	1		How much did the incident contribute to the outcome for the patient?

PatientEthnicity	code	Ethnicity	1	What is the patient's self-identified ethnicity?

29. Extension "practitioner-details"

Parent Profile:

Practitioner

- Incident
- Outcome
- Risk
- Good Care

Property Id	Data Type	Linked Taxonomy	Max	Dependencies	Example Question Text
ReporterContact	string		1		Provide your email address so that the MHRA can follow up with you about this incident if they need to.
ReporterInvolvement	code	Reporter relationship to event	1	Required: • Other (6): ReporterInvolvementOther	What was your relationship to the incident?
ReporterInvolvementOther	string		1		Please specify
ReporterOrganisation	code	ODS Codes	1	Applicable: • [No response]: ReporterOrganisationOther	Which organisation are you reporting from?
ReporterOrganisationOther	string		1		Please specify
ReporterRole	code	Staff type	1	Required: • Other (9): ReporterRoleOther	Which of these best describes your role?
ReporterRoleOther	string		1		Please specify
ReporterType	code	Reporter Type	1	Required: Other (5): ReporterTypeOther	Who are you?
ReporterTypeOther	string		1		Please specify
WhyAnonymous	code	Anonymity Reasons	100	Required: • Other (8): WhyAnonymousOther	Why are you recording this anonymously today?
WhyAnonymousOther	string		1		Please specify