Sentinel Event Data

Root Causes by Event Type

2004 – 2014

The Joint Commission

Joint Commission Root Cause Information

www.jointcommission.org/Sentinel_Event_Policy_and_Procedures/

- *Sentinel Events are reported to The Joint Commission voluntarily by an accredited organization* www.jointcommission.org/self_report_form/ *OR reported via the complaint process.* www.jointcommission.org/report_a_complaint.aspx
- *When a reviewable sentinel event is reported to The Joint Commission:*
  - *The health care organization is required to share its root cause analysis.*
  - *The root cause analysis is thoroughly reviewed by a specially trained Joint Commission clinician who then conducts a dialogue with the accredited organization to identify the root causes contributing to the event.*

www.jointcommission.org/Framework_for_Conducting_a_Root_Cause_Analysis_and_Action_Plan/

- *The events and their root causes are recorded in a de-identified database.*

Root Cause Definition

- *Fundamental reason(s) for the failure or inefficiency of one or more processes.*
- *Point(s) in the process where an intervention could reasonably be implemented to change performance and prevent an undesirable outcome.*
- *The majority of events have multiple root causes.*

Data Limitations

- *The reporting of most sentinel events to The Joint Commission is voluntary and represents only a small proportion of actual events. Therefore, these root cause data are not an epidemiologic data set and no conclusions should be drawn about the actual relative frequency of root causes or trends in root causes over time.*

Commonly Identified Root Cause Categories and Subcategories

- **Anesthesia Care**
  Planning, monitoring and/or discharge
- **Assessment**
  Adequacy, timing, or scope of; assessment; pediatric, psychiatric, alcohol/drug, and/or abuse/neglect assessments; patient observation; clinical laboratory testing; care decisions
- **Care Planning**
  Planning and/or collaboration
- **Communication**
  Oral, written, electronic, among staff, with/among physicians, with administration, with patient or family
- **Continuum of Care**
  Access to care, setting of care, continuity of care, transfer of patient, and/or discharge of patient
- **Human Factors**
  Staffing levels, staffing skill mix, staff orientation, in-service education, competency assessment, staff supervision, resident supervision, medical staff credentialing/privileging, medical staff peer review, other (e.g., rushing, fatigue, distraction, complacency, bias)

Commonly Identified Root Cause Categories and Subcategories *continued…*

- **Information Management**
  Information management needs assessment, confidentiality, security of information, data definitions, availability of information, technical systems, patient identification, medical records, aggregation of data

- **Leadership**
  Organizational planning, organizational culture, community relations, service availability, priority setting, resource allocation, complaint resolution, leadership collaboration, standardization (e.g., clinical practice guidelines), directing department/services, integration of services, inadequate policies and procedures, non-compliance with policies and procedures, performance improvement, medical staff organization, nursing leadership

- **Medication Use**
  Formulary, storage/control, labeling, ordering, preparing/distributing, administering, and/or patient monitoring

- **Nutrition Care**
  Nutrition care planning, timing, storage, and/or patient monitoring

- **Operative Care**
  Operative care planning, blood use, and/or patient monitoring

Commonly Identified Root Cause Categories and Subcategories *continued…*

- **Patient Education**
  Planning education, providing education, effectiveness of education
- **Patient Rights**
  Informed consent, participation in care, end-of-life care, pain management, privacy
- **Performance Improvement**
  Improvement planning, design/redesign testing, design/redesign measurement, data collection, data analysis, improvement actions
- **Physical Environment**
  General safety, fire safety, security systems, hazardous materials, emergency management, smoking management, equipment management, utilities management
- **Rehabilitation**
  Rehabilitation care planning, patient monitoring
- **Special Interventions**
  Special intervention planning, assessment, restraint equipment, patient monitoring
- **Surveillance, Prevention, and Control of Infection**
  Sterilization/contamination, universal precautions

Most Frequently Identified Root Causes of Sentinel Events Reviewed by The Joint Commission by Year

The majority of events have multiple root causes
(Please refer to subcategories listed on slides 5-7)

2012 (N=901)		2013 (N=887)		2014 (N=764)	
Human Factors	614	Human Factors	635	Human Factors	547
Leadership	557	Communication	563	Leadership	517
Communication	532	Leadership	547	Communication	489
Assessment	482	Assessment	505	Assessment	392
Information Management	203	Information Management	155	Physical Environment	115
Physical Environment	150	Physical Environment	138	Information Management	72
Continuum of Care	95	Care Planning	103	Care Planning	72
Operative Care	93	Continuum of Care	97	Health information technology-related	59
Medication Use	91	Medication Use	77	Operative Care	58
Care Planning	81	Operative Care	76	Continuum of Care	57

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Root Cause Information for Anesthesia-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=106) ***The majority of events have multiple root causes***	
Anesthesia Care	66
Assessment	60
Human Factors	60
Communication	57
Leadership	51
Physical Environment	16
Information Management	17
Medication Use	16
Continuum of Care	10
Care Planning	10

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Root Cause Information for Criminal Events--Assault/Rape/Homicide Reviewed by The Joint Commission

(Rape defined as un-consented sexual contact.

One or more of the following must be present to determine reviewability: Any staff witnessed sexual contact; or sufficient clinical evidence; or admission by the perpetrator)

2004 through 2014 (N=379) ***The majority of events have multiple root causes***	
Leadership	246
Human Factors	244
Assessment	225
Communication	218
Physical Environment	119
Patient Rights	75
Care Planning	50
Information Management	45
Continuum of Care	38
Special Interventions	16

The Joint Commission

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Root Cause Information for Delay in Treatment Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=971) ***The majority of events have multiple root causes***	
Communication	787
Assessment	753
Human Factors	701
Leadership	662
Information Management	279
Continuum of Care	253
Care Planning	170
Physical Environment	147
Medication Use	74
Patient Rights	27

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Root Cause Information for Elopement-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=94) ***The majority of events have multiple root causes***	
Communication	68
Assessment	66
Leadership	63
Physical Environment	59
Human Factors	51
Care Planning	21
Continuum of Care	14
Information Management	8
Special Interventions	7
Medication Use	5

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Root Cause Information for Fall-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=707) ***The majority of events have multiple root causes***	
Assessment	509
Leadership	412
Communication	411
Human Factors	402
Physical Environment	252
Care Planning	149
Information Management	84
Continuum of Care	57
Patient Education	50
Special Interventions	42

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Root Cause Information for Fire-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=117) ***The majority of events have multiple root causes***	
Communication	63
Leadership	57
Human Factors	51
Physical Environment	48
Assessment	44
Operative Care	33
Patient Education	24
Care Planning	23
Anesthesia Care	17
Information Management	12

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Root Cause Information for Infant Abduction Events Reviewed by The Joint Commission

(Any individual receiving care, treatment or services)

2004 through 2014 (N=28) ***The majority of events have multiple root causes***	
Leadership	22
Communication	21
Physical Environment	21
Human Factors	13
Assessment	12
Information Management	9
Care Planning	4
Continuum of Care	4
Performance Improvement	3
Patient Education	1

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Root Cause Information for Infection-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=177) ***The majority of events have multiple root causes***	
Leadership	93
Human Factors	91
Surveillance, Prevent. & Ctrl of Infect.	84
Communication	83
Assessment	61
Information Management	35
Physical Environment	29
Care Planning	29
Medication Use	19
Continuum of Care	18

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Root Cause Information for Maternal Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=125) ***The majority of events have multiple root causes***	
Human Factors	65
Communication	60
Assessment	51
Leadership	49
Information Management	27
Continuum of Care	19
Physical Environment	17
Care Planning	14
Medication Use	12
Anesthesia Care	7

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Root Cause Information for Medical Equipment-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=222) ***The majority of events have multiple root causes***	
Human Factors	162
Leadership	139
Physical Environment	135
Communication	129
Assessment	118
Information Management	29
Care Planning	23
Operative Care	11
Medication Use	9
Continuum of Care	7

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Root Cause Information for Medication Error Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=434) ***The majority of events have multiple root causes***	
Medication Use	380
Leadership	328
Human Factors	320
Communication	310
Assessment	188
Information Management	166
Physical Environment	71
Care Planning	46
Continuum of Care	41
Health Information Technology-related	15

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Root Cause Information for Op/Post-op Complication Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=845) ***The majority of events have multiple root causes***	
Human Factors	532
Communication	448
Assessment	412
Leadership	345
Information Management	151
Operative Care	109
Physical Environment	96
Care Planning	91
Medication Use	82
Continuum of Care	78

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Root Cause Information for Perinatal Events Reviewed by The Joint Commission

(Full-term infant 2500g or > and absence of obvious congenital abnormality; resulting in death or permanent loss of function)

2004 through 2014 (N=291) ***The majority of events have multiple root causes***	
Human Factors	231
Communication	204
Assessment	197
Leadership	183
Information Management	60
Physical Environment	54
Care Planning	31
Medication Use	24
Continuum of Care	24
Patient Education	11

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Root Cause Information for Radiation Overdose Events Reviewed by The Joint Commission

(Cumulative dose > 1500 rads to a single field, or any delivery of radiotherapy to the wrong body region or > 25% above the planned radiotherapy dose)

2004 through 2014 (N=38) ***The majority of events have multiple root causes***	
Leadership	32
Human Factors	31
Communication	24
Information Management	18
Assessment	16
Physical Environment	13
Care Planning	5
Operative Care	4
Health Information Technology-related	2
Medication Use	1

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Root Cause Information for Restraint-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=123) ***The majority of events have multiple root causes***	
Human Factors	98
Communication	83
Assessment	77
Leadership	77
Special Interventions	76
Physical Environment	47
Care Planning	25
Information Management	24
Medication Use	17
Continuum of Care	14

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Root Cause Information for Suicide Events Reviewed by The Joint Commission

(Suicide of any individual receiving care, treatment or services in a staffed around-the-clock care setting or within 72 hours of discharge)

2004 through 2014 (N=856) ***The majority of events have multiple root causes***	
Assessment	684
Communication	503
Human Factors	471
Leadership	440
Physical Environment	342
Information Management	190
Continuum of Care	163
Care Planning	158
Medication Use	51
Special Interventions	24

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Root Cause Information for Transfer-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=27) ***The majority of events have multiple root causes***	
Continuum of Care	20
Communication	20
Leadership	17
Assessment	15
Human Factors	14
Care Planning	6
Information Management	5
Physical Environment	3
Special Interventions	2
Anesthesia Care	1

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Root Cause Information for Transfusion-related Events Reviewed by The Joint Commission

(Hemolytic transfusion reaction involving administration of blood or blood products having major blood group incompatibilities)

2004 through 2014 (N=127) ***The majority of events have multiple root causes***	
Leadership	106
Human Factors	91
Information Management	86
Communication	70
Medication Use	45
Assessment	43
Physical Environment	17
Operative Care	6
Care Planning	4
Continuum of Care	4

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Root Cause Information for Unintended Retention of Foreign Object Events Reviewed by The Joint Commission

2004 through 2014 (N=986) ***The majority of events have multiple root causes***	
Leadership	790
Human Factors	679
Communication	643
Operative Care	506
Assessment	256
Physical Environment	214
Information Management	145
Continuum of Care	26
Performance Improvement	20
Care Planning	12

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Root Cause Information for Ventilator-related Events Reviewed by The Joint Commission

(Resulting in death or permanent loss of function)

2004 through 2014 (N=49) ***The majority of events have multiple root causes***	
Human Factors	39
Leadership	28
Communication	27
Physical Environment	26
Assessment	25
Information Management	10
Special Interventions	7
Care Planning	6
Continuum of Care	6
Anesthesia Care	4

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Root Cause Information for Wrong-patient, Wrong-site, Wrong-procedure Events Reviewed by The Joint Commission

(Regardless of the magnitude of the procedure)

2004 through 2014 (N=1102) ***The majority of events have multiple root causes***	
Leadership	908
Human Factors	772
Communication	759
Assessment	398
Information Management	390
Operative Care	353
Physical Environment	99
Patient Rights	66
Anesthesia Care	56
Continuum of Care	39

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