

Failure Modes and Effects Analysis (FMEA) Tool

FMEA for Med Surg-OR

United States
Hospital-Community

Aim: To develop a Failure Mode Effects Analysis document for communication hand-offs between Med Surg and OR.

Process Data

Date: 06/01/2006

Step Description

1 Surgeon speaks with patient.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Surgeon must speak with POA, instead of with patient.	Communication barrier/issue with patient.	Information may not be correctly relayed to patient.	5	1	9	45	
Surgeon fails to speak to patient.	Surgeon is in OR.	No communication from Surgeon regarding surgical procedure.	1	5	5	25	
Patient requires an interpreter.	Non-English speaking patient.	Communication barrier.	1	1	9	9	

Step Description

2 Surgeon notifies OR, Anesthesia and Primary RN.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Surgeon fails to notify everyone of patient's scheduled surgery.	No checklist for whom to call.	Incomplete communication.	1	9	9	81	

Step Description

3 HUC receives orders on chart.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
HUC not aware of standing orders that are required.	Inadequate training or knowledge of standing orders; system for standing orders not "user friendly."	Required orders are not entered.	9	9	9	729	Edit Pre-Procedure Physician Orders form for OMH purposes. Educate physicians and staff in use. Educate staff re: standing orders. Use Safety Reporting System to track problems.
Surgeon did not write complete orders.	Surgeon assumed that orders are known.	Required orders are not entered.	5	9	9	405	Edit Pre-Procedure Physician Orders form for OMH purposes. Educate physicians and staff in use. Educate staff re: standing orders. Use Safety Reporting System to track problems.
Surgeon already entered POE. own orders.		RN not contacted by surgeon about entered orders; chart not flagged for new orders.	1	9	5	45	
Inadequate time available to complete all orders.	Excessive volume; late notice; interruptions.	Required orders are not entered.	1	1	9	9	
HUC does not receive orders from surgeon.	Chart not available; HUC not at desk.	Required orders are not entered.	1	1	9	9	

Step Description

4 RN responsible for all orders being completed.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
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RN not aware of standing orders that are required.	Inadequate training or knowledge of standing orders; system for standing orders not "user friendly."	Required orders are not entered.	9	9	9	729	Edit Pre-Procedure Physician Orders form for OMH purposes. Educate physicians and staff in use. Educate staff re: standing orders. Use Safety Reporting System to track problems.
Orders are missed or forgotten.	"Pre-charting;" didn't remember.	Required orders are not entered.	1	5	9	45	
Inadequate time available to complete all orders.	Excessive volume; late notice; interruptions.	Required orders are not completed.	1	1	9	9	
Patient not present for orders to be carried out.	Patient having ancillary tests, etc.	Required orders are not entered.	1	1	9	9	
Patient refuses to allow orders.	Patient preference.	Required orders are not entered.	1	1	1	1	

Step Description

5 RN starts/checks IV.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Unable to start IV.	Dehydrated; no veins; poor veins; novice RN; patient requests Anesthesia start.	No IV placed.	1	1	1	1	

Step Description

6 HUC obtains old records.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Fails to order old records.	Forgot.	No old records in time for surgery.	1	1	9	9	

Step Description

7 RN signs off orders.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Fails to sign off orders.	Too busy; too many interruptions, etc.	Additional verification necessary.	5	1	5	25	

Step Description

8 RN reports abnormal results to surgeon.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Fails to notify surgeon of abnormal.	Results not available; patient taken earlier than scheduled.	Delayed results; surgical delay.	5	1	9	45	
Fails to notify surgeon of abnormal (delay).	Delayed results.	Delayed results; surgical delay.	1	1	9	9	

Step Description

9 RN completes Preop orders (excluding prophylactic ABs).

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Inadequate time available to complete all orders.	Patient taken earlier than expected (OR aware that orders are not complete).	Required orders are not completed.	5	1	5	25	
Inadequate time available to complete all orders (volume).	Excessive volume; late notice; interruptions.	Required orders are not completed.	1	1	9	9	

Step Description

10 H&P transcribed.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
H&P not transcribed.	Dictated on the wrong line; not dictated timely; transcription issues.	No transcribed H&P.	5	1	9	45	
Surgeon didn't dictate.	Too busy; too many interruptions, etc.	No transcribed H&P.	1	1	9	9	

Step Description

11 RN completes and documents Preop checklist.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Inadequate time available to complete tasks on checklist.	Too busy; too many interruptions, etc.	Checklist tasks are not completed.	1	5	9	45	
Documented as done, but task not completed.	Forgot to complete; delegated, but wasn't done.	Checklist tasks are not completed.	1	5	9	45	
Inadequate time available to document on checklist.	Computer system cumbersome to work with.	Checklist documentation not completed.	5	1	5	25	

Inadequate time available to complete tasks on checklist (early).	OR calling for patient earlier than expected.	Checklist tasks are not completed.	1	1	9	9
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Step Description

12 RN prints med reconciliation sheet.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Fails to print.	Forgot; education issue.	No med reconciliation sheet.	5	1	9	45	
RN D/Cs meds before printing reconciliation sheet.	Human error.	Blank med reconciliation sheet.	1	1	9	9	

Step Description

13 RN D/Cs current meds, etc.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Fails to D/C meds.	Forgot; too busy.	Meds, etc., still in computer; possible errors downstream.	1	1	5	5	

Step Description

14 OR calls for patient.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
No phone call received.	Change in OR schedule.	No notification before OR arrives on unit (come earlier than expected).	1	1	9	9	
No phone call received (n/a).	Nobody answering on unit; forgot to call.	No notification before OR arrival on unit.	1	1	5	5	

Step Description

15 OR calls Transport to get patient.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Transport not called.	Forgot; interruptions.	Delayed transport to OR.	1	5	9	45	
Transport called, but response delayed.	Transport busy.	Delayed transport to OR.	1	1	5	5	

Step Description

16 RN D/Cs PCA pump (or sends, if on continuous basal).

Step Description

17 Transport arrives and takes patient to OR.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Transport does not arrive in timely fashion.	Transport busy.	Delayed transport to OR.	1	1	9	9	

Step Description

18 RN sends prophylactic ABs with patient chart.

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
RN does not know antibiotics need to be sent.	Incomplete communication regarding process.	Therapeutic level not established prior to surgery.	5	1	9	45	
Surgeon variation in ordering (on call to OR; 1 hr pre-op; in holding).	Unaware of current improvements.	Therapeutic level not established prior to surgery.	1	5	9	45	

Step Description

19 RN directs patient's family/visitors to appropriate waiting area.

Calculated Totals

Total Risk Priority Number for the process 2673

Occ: Likelihood of Occurrence (1-10)

Det: Likelihood of Detection (1-10)

NOTE: 1 = Very likely it WILL be detected

10 = Very likely it WILL NOT be detected

Sev: Severity (1-10)

RPN: Risk Priority Number (Occ x Det x Sev)

Annotation

None