

# Upstream checklist before Sign-in of Surgical Safety Checklist prevent wrong patient, wrong side & wrong site surgery

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HA Convention

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Wales Hospital, NTEC

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## SURGICAL SAFETY

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OT Date : Theatre :

## CONSENTING PROCESS

- ☐ Surgeon has confirmed the following patient's information  
• Name & HKID • Diagnosis • Procedure / Side
- ☐ Consent has been confirmed consistent with OT list

Marking  
☐ Yes ☐ N/A

Positioning  
☐ Supine ☐ Prone ☐ Other (OT list remark)

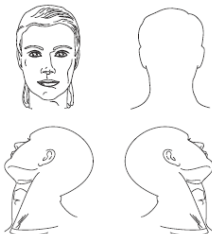
'Type & Screen' required  
☐ Yes ☐ No (Risk of blood loss < 500ml (7ml/kg in child)

Availability of essential medical devices confirmed (OT list remark)  
☐ Yes ☐ N/A

## Please indicate the mark in the diagram.

## 1. HOW?

- The mark should be an ARROW made by indelible mark preparation
- A "R" or "L" is used for EYE patients
- Multiple operation sites must be individually marked



## 2. WHEN &amp; WHERE?

- The surgical site should be marked in the surgical ward or Day-surgery ward prior to patient transfer to the operating theatre
- Marking should take place before pre-medication

## 3. WHO?

- Marking should be undertaken by operating surgeons or non-operative staff
- The process of pre-operative marking should involve the patient

## Circumstances where marking may not be appropriate

- Emergency surgery should not be delayed due to lack of marking
- Situation where the laterality of surgery needs to be confirmed in theatre

Pre-operation Checklist  
(By Ward & OT Nurse)

Please put a "✓" in appropriate boxes after ward nurse

- Patient identity\* (Name & ID) against bracelet and medical notes
- Consent for operation is consistent with OT list: ☐ Confirmed ☐ Not applicable  
Consent for blood transfusion: ☐ Yes ☐ Not applicable
- Site marking\*: ☐ Confirmed ☐ Not applicable
- Type & Screen with report: ☐ Available ☐ Not required  
Blood components: ☐ Available ☐ Not required
- Pre-op instruction (including investigation results) from ward: ☐ Yes ☐ Nil instruction
- Allergic history: ☐ Nil ☐ Drug ☐ Others
- Infectious status: ☐ Nil ☐ Yes  
Precaution: ☐ Contact ☐ Droplet ☐ Airborne ☐ Blood
- Level of consciousness: ☐ Awake ☐ Drowsy ☐ Unconscious
- Body weight: ☐ Measured ☐ Not available
- Fasting: ☐ Yes ☐ Not required
- Medication (Refer to MAR):  
Current medication: ☐ Nil ☐ Taken  
Pre-medication: ☐ Nil ☐ Given in ward  
Brought to OT: ☐ Nil ☐ Yes
- Physical Preparation: ☐ Not required ☐ Done, include:  
☐ Gowning ☐ Skin prep ☐ Bowel prep ☐ Empty bladder
- Removable items: ☐ Nil ☐ Removed
- Unremovable items/implants: ☐ Nil  
☐ Fixed denture ☐ Loose teeth ☐ Artificial nail ☐ Piercing  
☐ Others
- Pre-packed gauze in patient:  
☐ Nil ☐ Yes, Nature / Site
- Items brought to OT: ☐ Nil  
Document: ☐ Old Medical notes ☐ X-ray films ☐ Photographs  
☐ Aids: ☐ Hearing Aid ☐ Eyeglasses  
☐ Others
- Other Remarks:

\* Notify OT when there is any discrepancy or abnormality upon check

## WARD NURSE

Signed :  
Print :  
Date :  
Time :

Pre-operation Checklist  
(By Ward & OT Nurse)

Please put a "✓" in appropriate boxes after ward nurse

- ☐ Paed (Medical / Surgical / Orthopaedic / ENT / Eye)
- Identification bracelets (with ☐ Pseudo ID ☐ Birth)
  - Inform: ☐ Parents ☐ Next of kin to read the Anaesthesia consent
  - Inform parent to be present for anaesthetist visit before operation:  
☐ 4pm to 6:30pm on weekday  
☐ 12N to 2pm on Saturday  
☐ Other time: at (time) on
  - Change TPN to IVF: ☐ Yes ☐ Not applicable
  - Equipment & Monitor to OT (Refer to Memo): ☐ Yes ☐ No
  - Special items to OT:  
☐ Basket / Box for blood component ☐ Blanket to keep patient warm  
☐ Arterial Line ☐ Chest Drain Bottle (eg. PDA Ligation)

## O &amp; T

- Appliances brought to OT: ☐ Nil  
☐ Cryocuff (Site) ☐ Abduction Pillow  
☐ Halo instrument (with Memo) ☐ Ice Tong Caliper  
☐ Neck Collar ☐ Sand bag x 2 ☐ Chest Drain + Kock  
☐ Skeletal Traction Instrument with Memo ☐ Swivel
- Disposable underwear ☐ Anti-embolic Stocking
- Check: ☐ No ornaments / valuables on limbs ☐ No

## OBS

- Assessment:  
Fetal: ☐ Fetal heart rate (FHR):
- Intervention:  
☐ Indication for Em / El. Caesarean Section / MROP /  
was explained by Dr.   
☐ Anaesthetist Dr. visited clinic  
Pre-op inform: ☐ LW ☐ AN ward ☐ PN ward ☐ P
- Baby's bracelets are prepared by the nurse and checked

## ICU

- Equipment brought to OT: ☐ Nil  
☐ Cardiac monitor + cable  
☐ Pressure cable + pressure bag + transducer  
☐ Oximeter + cable + probe  
☐ ETCO2 + cable + adaptor  
☐ Laerdal bag + reservoir + mask  
☐ Oxylog + tubing  
☐ Oxygen cylinder + regulator  
☐ Drip stand nos  
☐ Syringe pump + power cable  
☐ Others:

Time :

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## SURGICAL SAFETY

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## THEATRE, BEFORE ANAESTHESIA

- ☐ Anaesthetist (Surgeon in LA) has confirmed the following patient's information  
• Name & HKID  
• Diagnosis  
• Procedure / Side

☐ Anaesthesia safety check completed (Concentration & dosage of LA)

In case of regional anaesthesia, site checked against surgical procedure with nurse ☐ Yes

Known drug allergy ☐ Yes ☐ No

Fixed dentures / Crowns / Loose teeth ☐ Yes ☐ No

SIGN IN  
Anaesthetist (Surgeon in LA)

Signed :  
Print :  
Date :  
Time :

## BEFORE INCISION

☐ Time Out • Name & HKID • Diagnosis • Procedure / Side

Anaesthetist Signed :  
Print :  
Nurse Signed :  
Print :

Marking ☐ Confirmed ☐ N/A

## Briefing

Anticipated critical events & patient specific concerns ☐ Discussed ☐ N/A

Prophylactic antibiotics ☐ Checked & Given ☐ N/A

Availability of essential medical devices confirmed (OT list remark)

☐ Yes ☐ N/A

TIME OUT  
(Surgeon)

Signed :  
Print :  
Date :  
Time :

## BEFORE LEAVING THEATRE

- ☐ Instrument, gauze & needle count correct  
☐ Name of procedure recorded

Specimen label confirmed and sent  
☐ Yes ☐ N/A

Equipment problem addressed  
☐ Yes ☐ N/A

## Debriefing

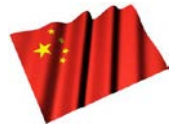
Key concerns for recovery and management of this patient

☐ Reviewed ☐ N/A

SIGN OUT  
(Circulating nurse)

Signed :  
Print :  
Date :  
Time :

# Implementation of 123 Surgical Safety 123

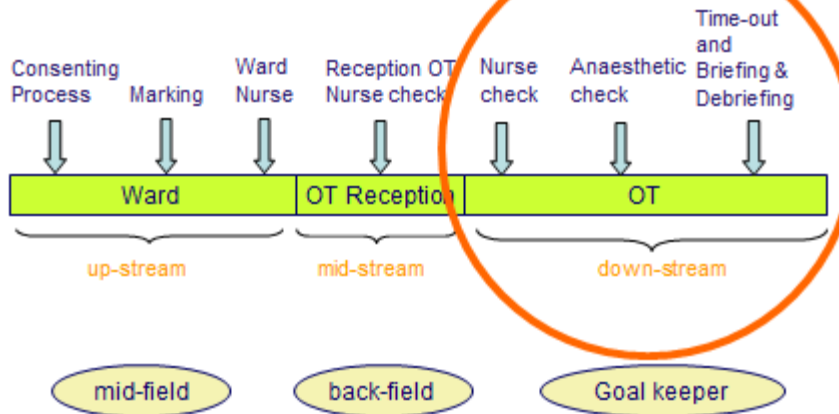
<i><b>Milestones</b></i>	<i><b>Date</b></i>
Trial run in Department of Surgery (elective)	9 Feb 2009
Audit & Evaluation	April 2009
Live run in all elective cases in PWH (all depts)	17 Aug 2009
Live run in all elective AND emergency cases, PWH	1 Oct 2009 

# Phase I : Operation Theatre

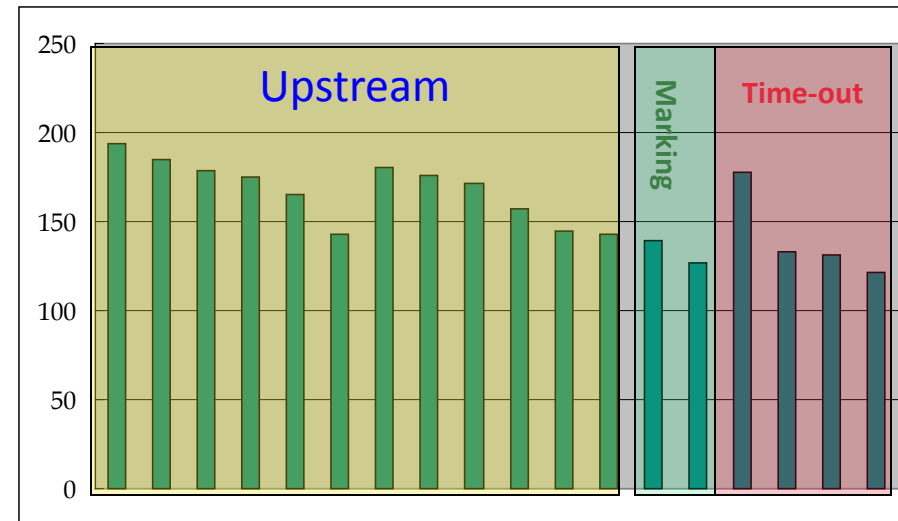
- Jan 2008 – Oct 2009
- From *Time-out* to Checklist *123 Surgical Safety 123*
- FMEA : Failure Mode & Effects Analysis

## Journey of a Surgical Patient

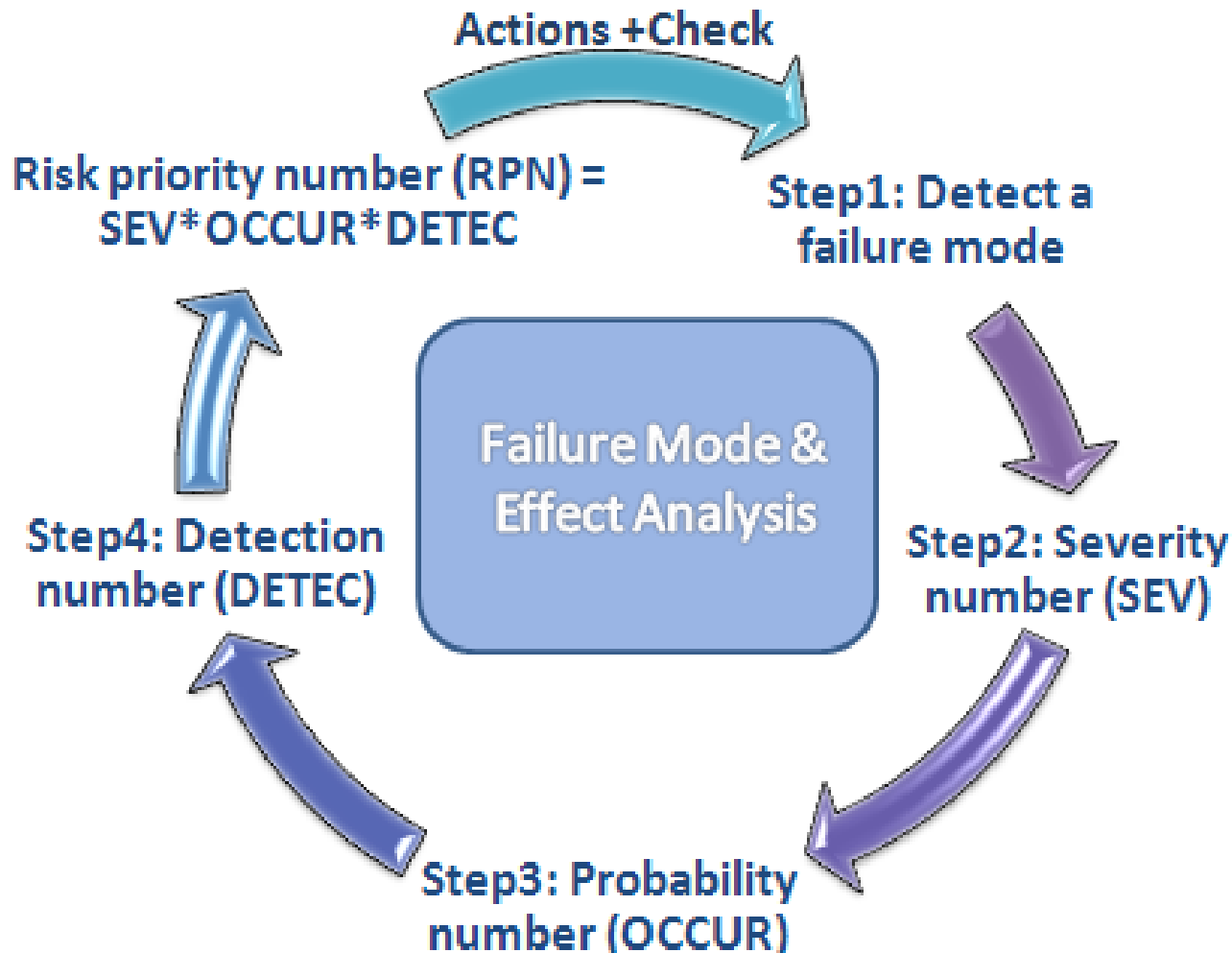
Covered in current time-out



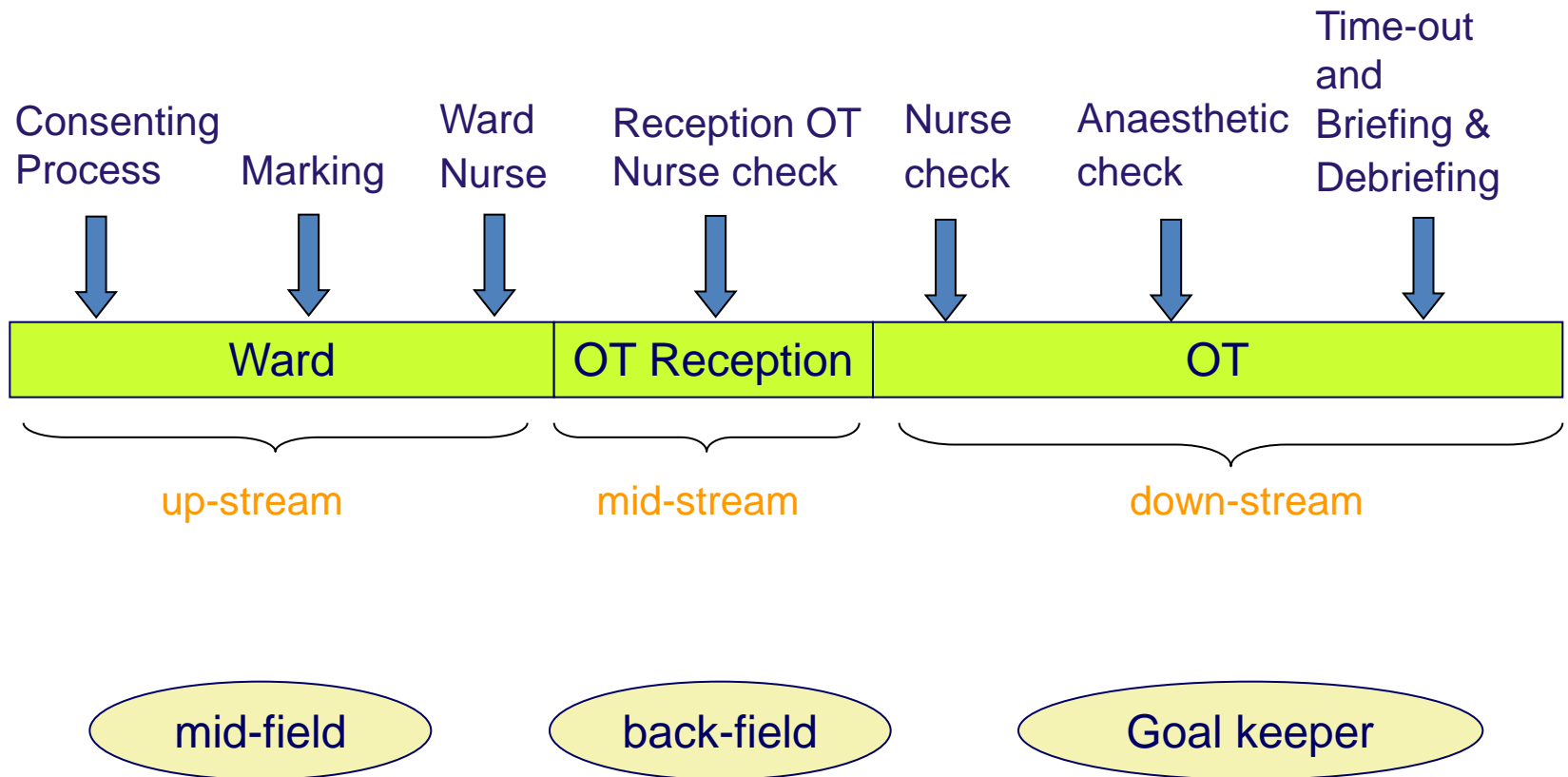
Goal keeper cannot survive alone! Mid-field and back-field are important!



# Failure Mode & Effects Analysis (FMEA)



# Journey of a Surgical Patient



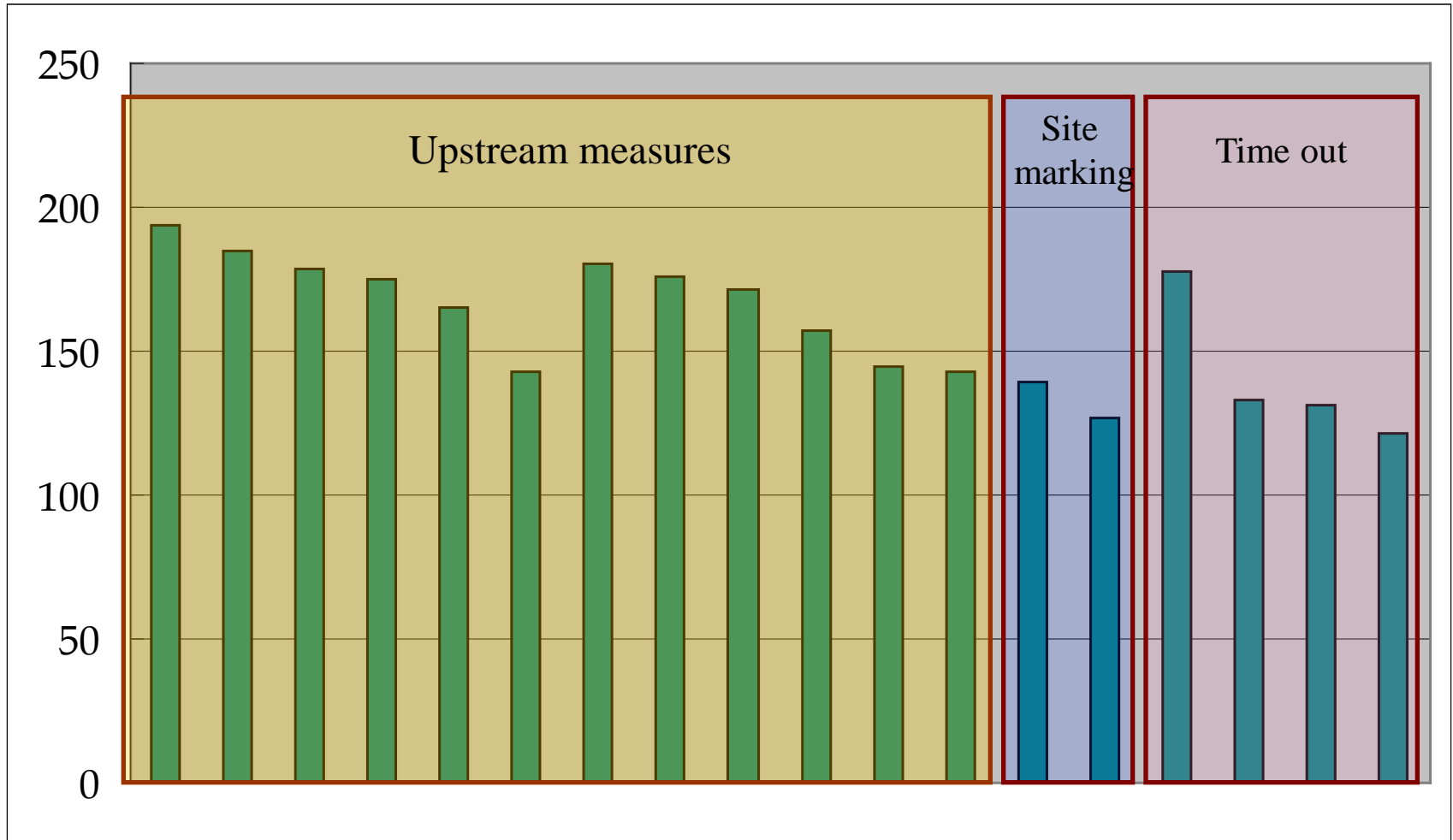
# FMEA worksheet

A	B	C	D	E	F	G	H
Process	Sub-process	Failure mode	Severity (1-4)	Frequency (1-4)	Criticality (ExF)	Existing practices	Remedies
<b>EXAMPLE</b> Decision of procedure		Inaccurate documentation (inaccurate clinical diagnosis excluded)	2	1	2 x 1 = 2		
Decision of procedure		Inaccurate documentation (inaccurate clinical diagnosis excluded)					
Transcription error		Error in copying from one system to another					
		Errors in input into computer in particular					
Documentation		Insufficient/inaccurate written documentation					
		Errors in verbal communication					
	Consent	Inaccuracy/incompleteness/inconsistency					
	Label	Wrong patient's gum label used					
Verification		Checking protocol not stringent enough					

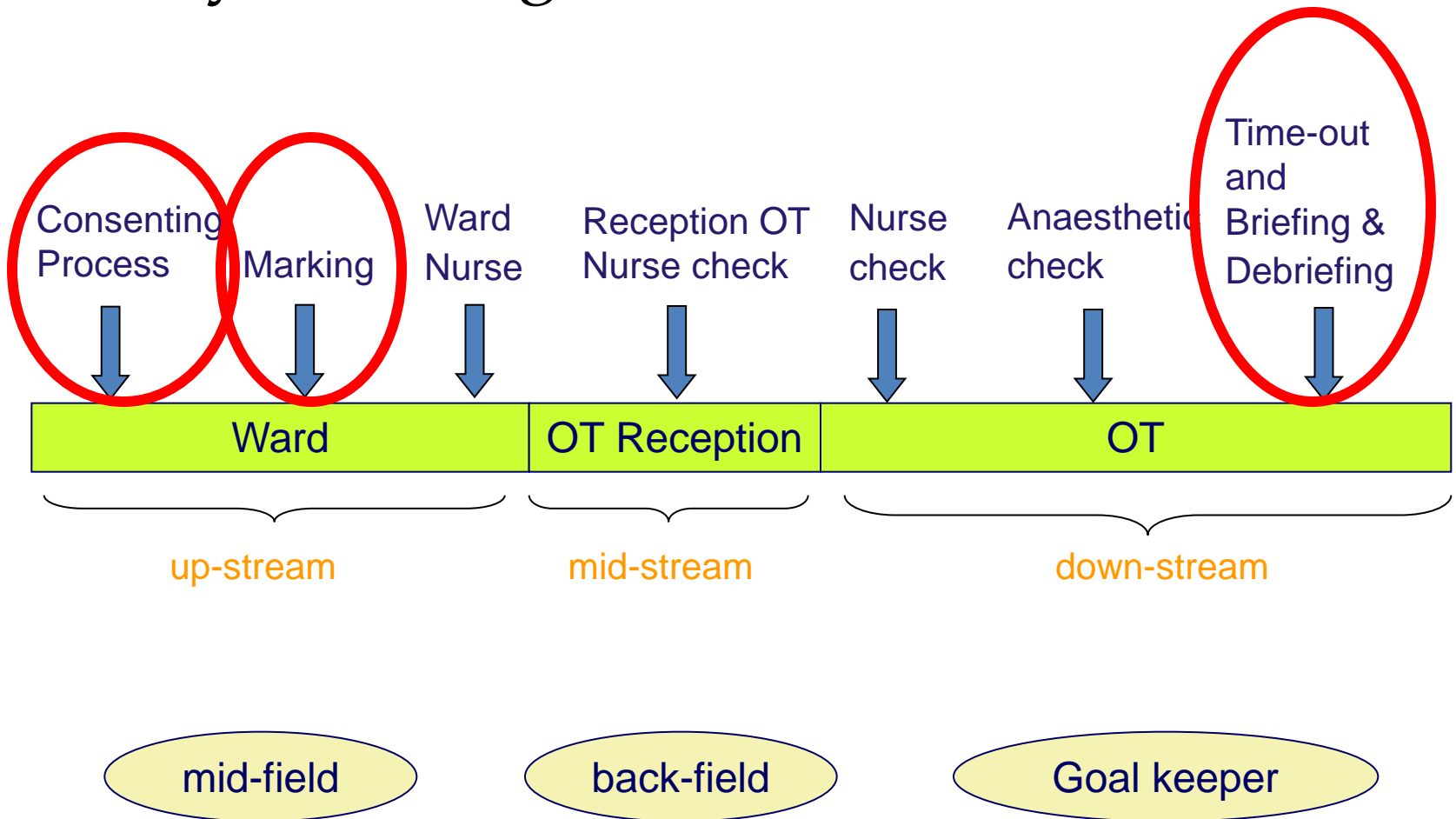
<b>Rank</b>	<b>Score</b>	<b>Description</b>
1	194	Documentation - insufficient written information
2	185	Gum label
3	180	Errors in verbal communication
4	179	Transcription error
5	178	Complex cases, multiple teams
6	176	Culture
7	175	Consent
8	171	Checking procedure not focused enough
9	165	Errors in computer input
10	157	Patient factor
11	145	Miscommunication between departments
12	143	Checking protocol not stringent enough
13	143	Inaccurate documentation
14	139	Wrong/inaccurate marking
15	133	Too many/too few people involved (time out)
16	131	Inappropriate or incomplete timing
17	127	No standard way of surgical marking
18	121	Some key parties not involved

# FMEA Task Force

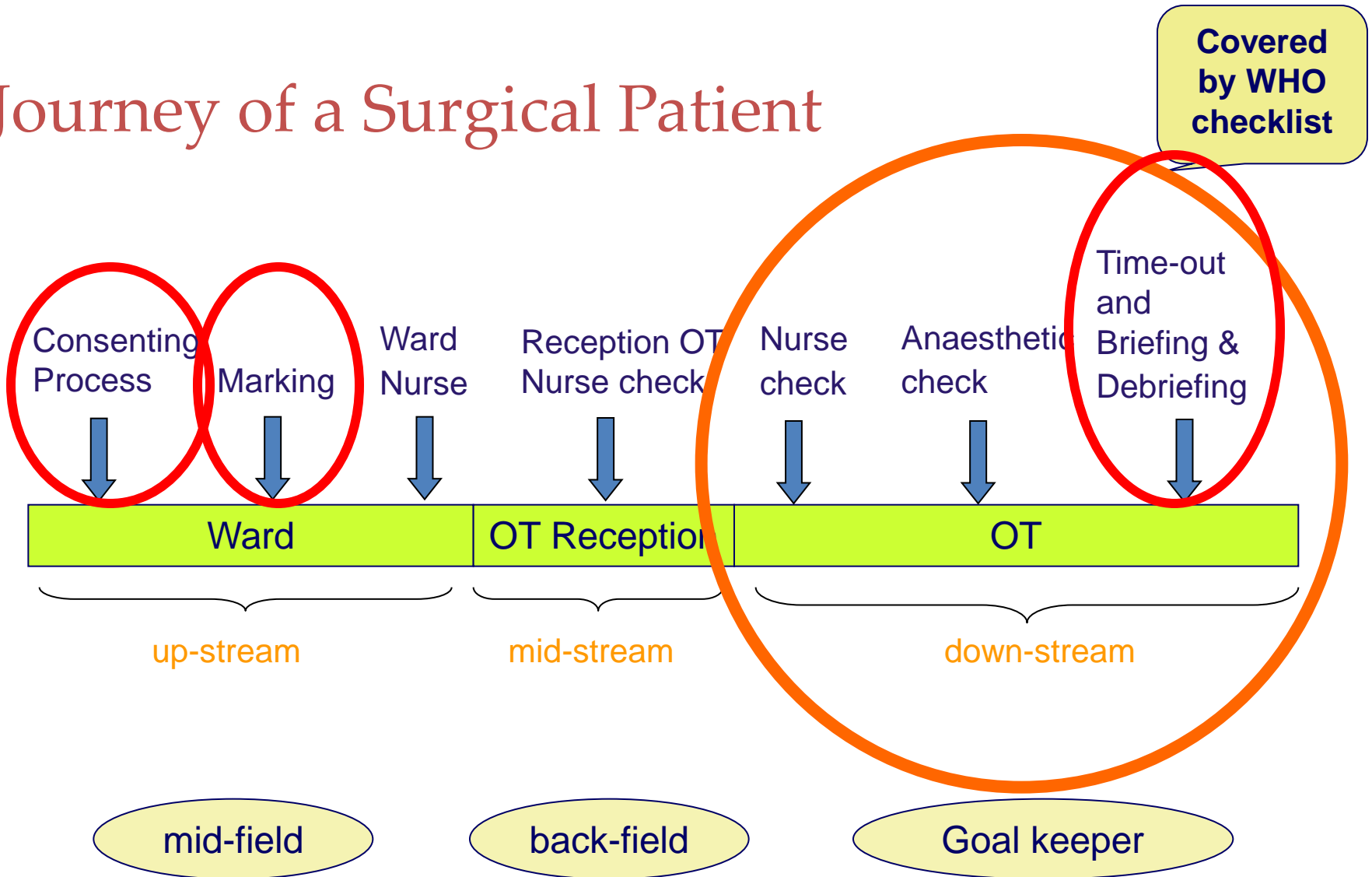
## Prevention of Wrong patient, Wrong site/side Surgery



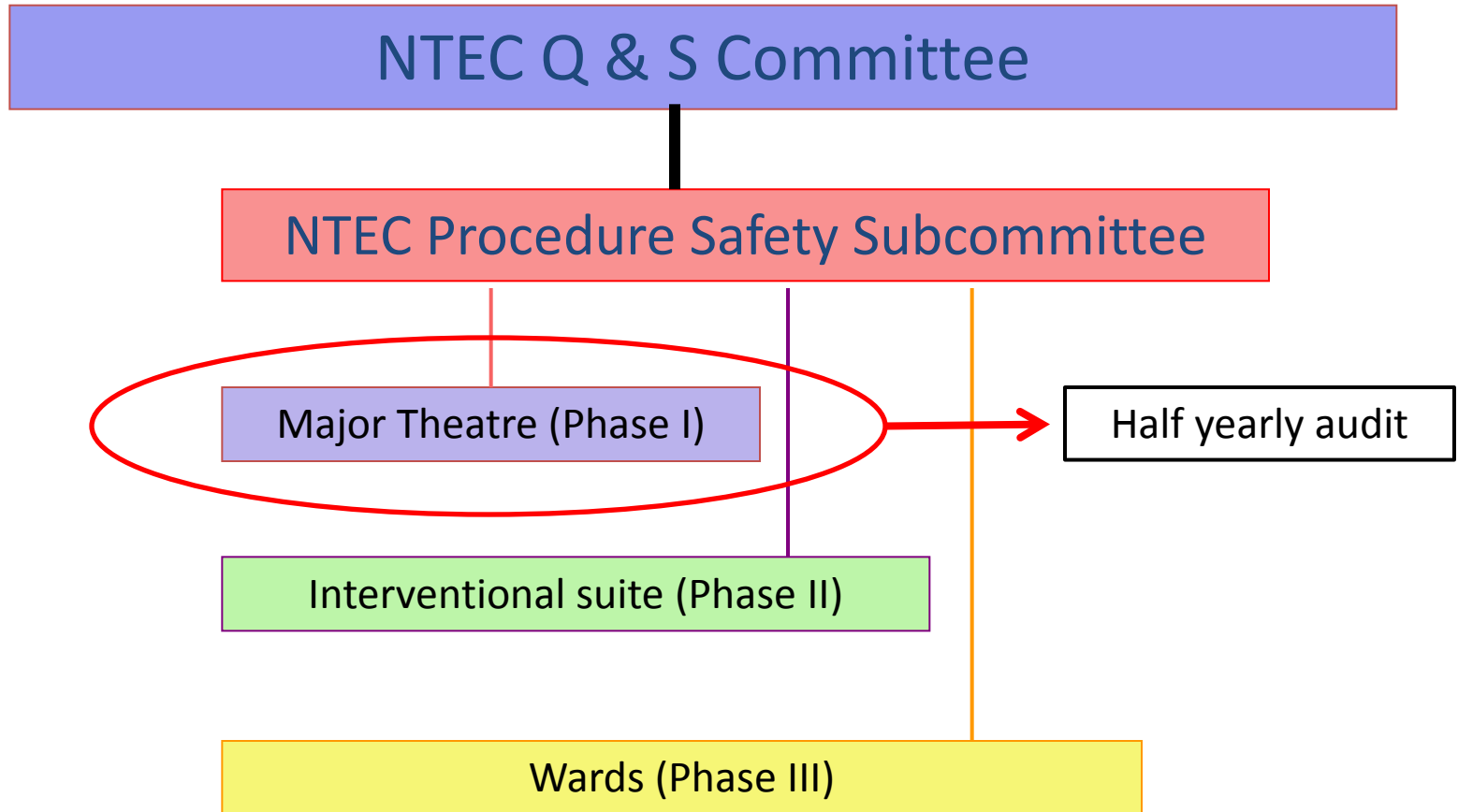
# Journey of a Surgical Patient



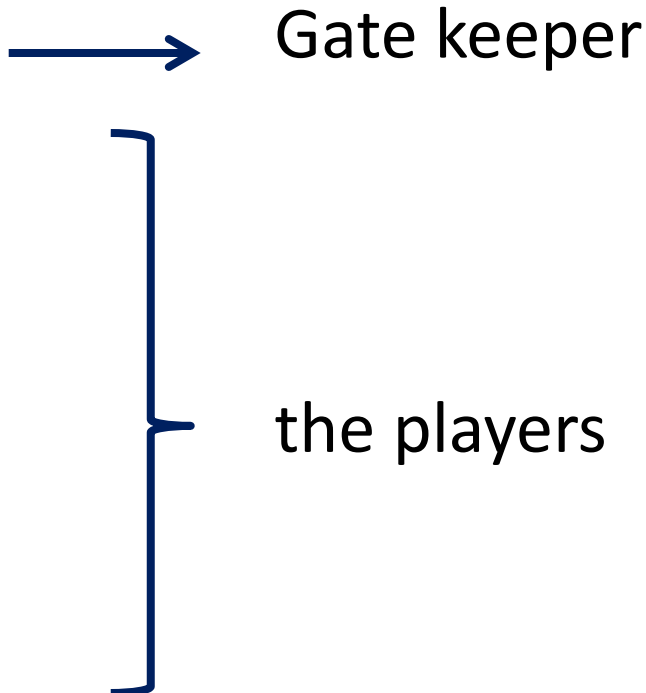
# Journey of a Surgical Patient



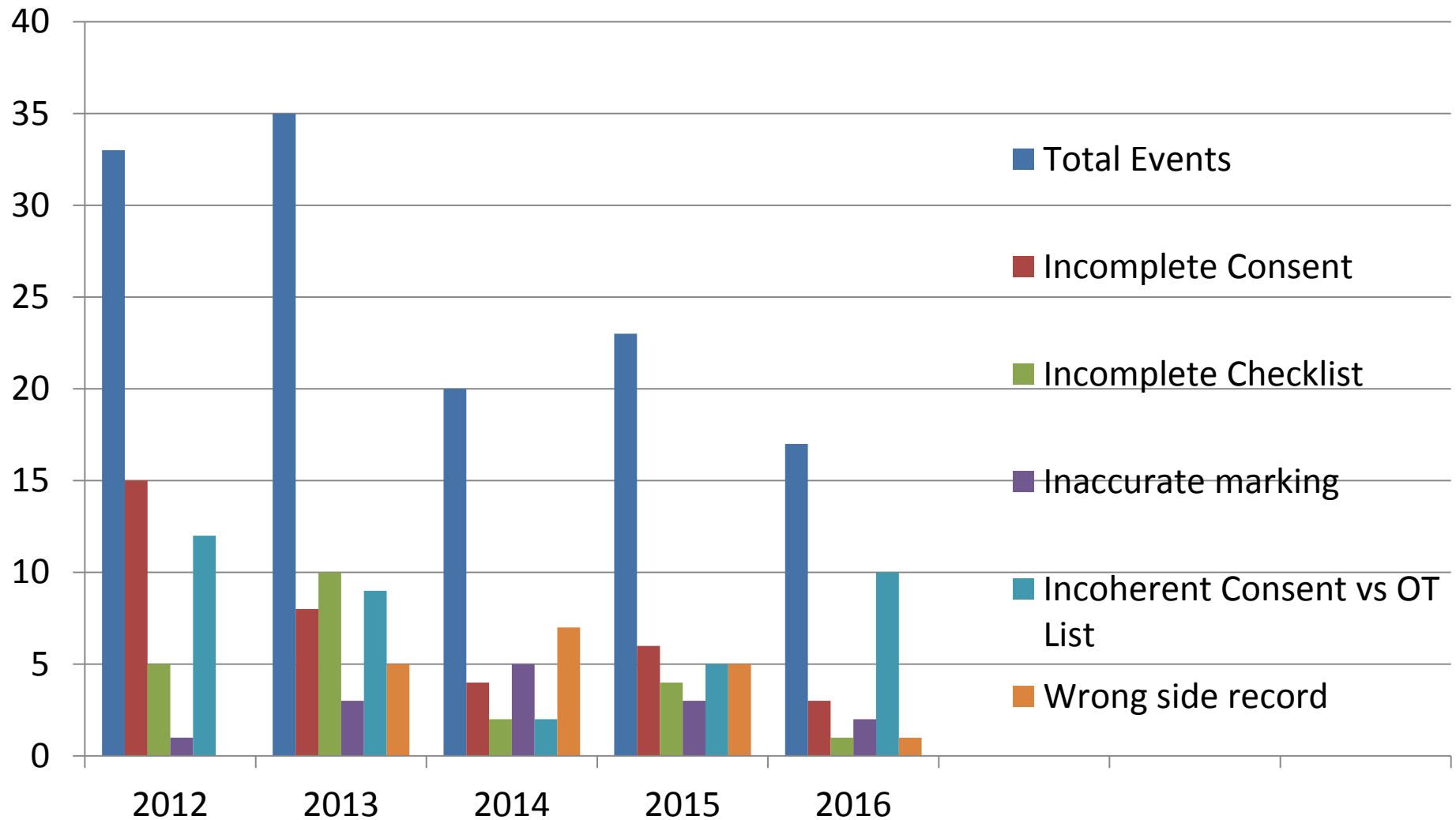
# NTEC Procedure Safety Subcommittee



# Since 12Q2011

- Audit group from OT users
    - Nurses → Gate keeper
    - Surgeons
    - Anaesthetists
    - Orthopeadics
    - Ophthalmologist
    - ENT Surgeons
    - Gynaecologists
    - Dentist
- the players
- 

# 2012-2016

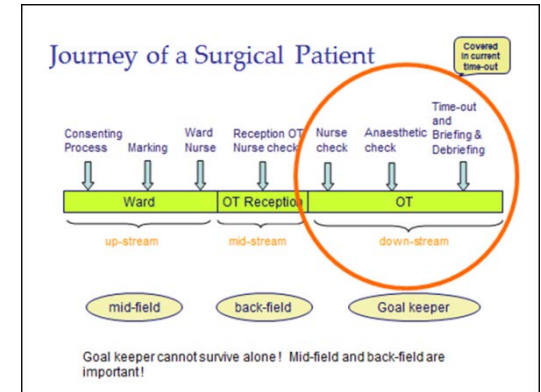
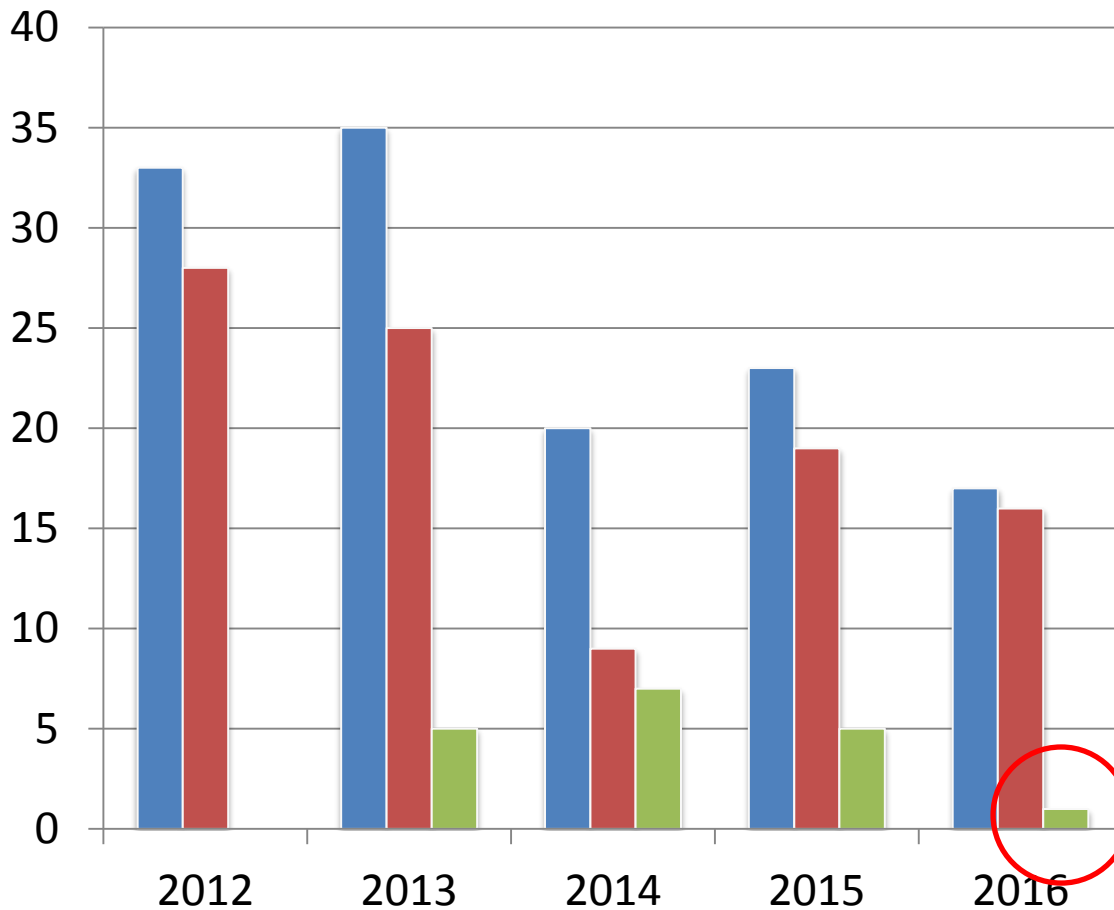


# 2012 - 2016

Year	Event	Operations/yr	%
2012	33	11221	0.294%
2013	35	10871	0.322%
2014	20	11210	0.178%
2015	23	10562	0.218%
2016	17	10689	0.159%
Total	128	54553	0.235%



# 2012-2016



- Total Events
- Exclude Checklist Compliance
- Major events (near miss)

# Lethal wrong documentation

Year	Event	Operations/yr	%
2012	0	11221	
2013	5	10871	0.0460%
2014	7	11210	0.0624%
2015	5	10562	0.0473%
2016	1	10689	0.0094%
Total	18	54553	0.0330%

Upstream is the culprit and the solution

Thank you