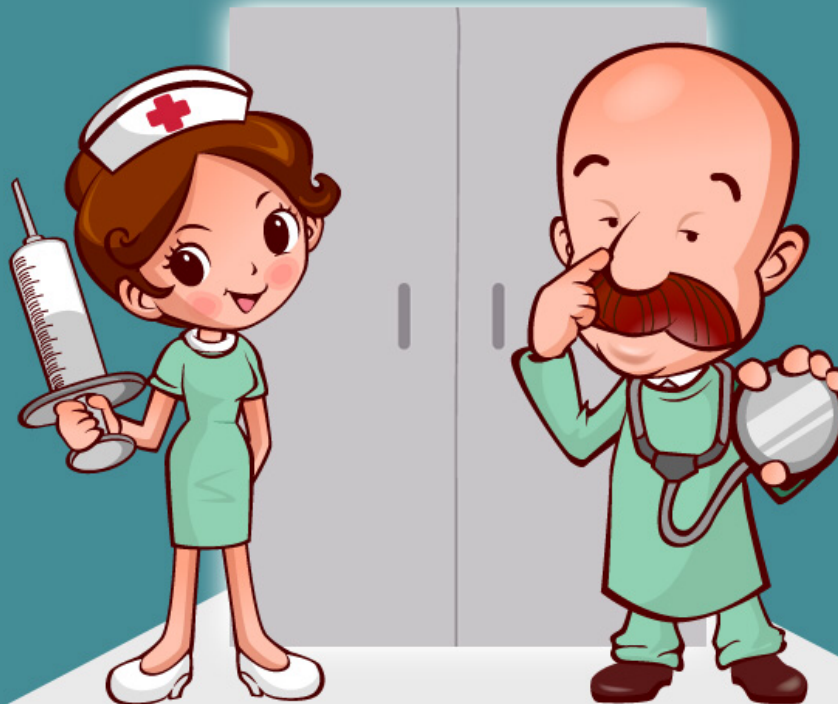


# Patient Safety and Invasive Procedures



# Learning objectives



## To understand :

- The main causes of adverse events in surgical and invasive procedural care.
- How to use the guidelines, verification processes and teamwork to facilitate the correct patient receiving the correct treatment at the appropriate time and place
- The verification processes to avoid wrong patient, wrong side and wrong procedure errors (e.g. ID Wrist band, a surgical checklist )
- Adhere to practice techniques that reduce risks and errors (e.g. time-outs, briefings, debriefings, stating concerns)

# The Main Causes of adverse events associated with invasive procedural and surgical care



- **Poor infection control methods**
- The implementation of safer infection control practices such as
  1. Administration of prophylactic antibiotics
  2. Hand hygiene (5mts) has reduced postoperative
  3. Personal protective equipment
- **Inadequate patient management**
- inadequate implementation of protocols or guidelines
- poor leadership and poor teamwork
- conflict between different departments/groups
- inadequate training and preparation of staff
- inadequate resources
- Overwork
- lack of a system for managing performance



Failure to communicate effectively before, during and after procedures:

to communicate effectively before, during and after operative procedures (e.g. insufficient use of SBAR & Miscommunication ).

# Types of communication failure associated with doctors



Type of Failure	Definition	Illustrative example
Occasion	Problems in the situation or context of the communication event	The staff surgeon asks the anesthesiologist whether antibiotics have been administered. At this point, the procedure has been under way for over an hour
Content	Insufficient or inaccurate information being transferred	As they are preparing for the procedure, the anesthesia fellow asks the staff surgeon if an ICU bed has been reserved for the patient. The staff surgeon replies that the "bed is probably not needed, and there is not likely one available anyway, so we'll just go ahead
Audience	Gaps in the composition of the group engaged in the communication	The nurses and the anaesthesiologist discuss how the patient should be positioned for surgery without the participation of a surgical representative

# The main adverse events due to inadequate patient management associated with Surgical Care include:



- Infections and postoperative sepsis
- Cardiovascular complications
- Respiratory complications
- Thromboembolic complications

## Verification processes for improving surgical care:



- A verification process ensures that the correct procedure is performed on the right patient, right side, site and the right organ. Effective methods exist, such as evidence-based **guidelines, protocols or checklists**, to support health-care providers achieve safer care

# Verification processes for improving surgical care:



## Guideline

- Systematically derived statements that help practitioners to make decisions about care in specific clinical circumstances. These should be research or evidence based

## protocol

- is a set of sequential steps that should be followed in a particular order, enabling the task to be completed.

## Checklist

- is used to ensure that certain mandatory items are not forgotten. Such as (timeout )



# The Verification Processes for Improving Surgical Care



## Surgical consent form

a **form** signed by a patient prior to a medical procedure to • confirm that he or she agrees to the procedure and is aware of any risks that might be involved. The primary purpose of the **consent form** is to provide evidence that the patient gave consent to the procedure

## Pre-operation checklist

Tool to promote patient safety in the perioperative period • Intended to give teams a simple, efficient set of priority • checks for improving effective teamwork and communication

## Surgical safety checklist

communication tool that is used by a team of operating room • professionals (nurses, surgeons, anesthesiologists, and others) to discuss important details about a surgical case at three distinct stages or phases during surgery: Pre-induction, Time out, and Debriefing

# Surgical consent form



جامعة الملك سعود  
المستشفيات الجامعية  
King Saud University  
University Hospitals



Name: \_\_\_\_\_  
Nationality: \_\_\_\_\_  
Patient No.: \_\_\_\_\_  
Sex: \_\_\_\_\_ D.O.B.: \_\_\_\_\_

## Informed Consent for Surgical Operation / Procedure

To be filled by the Patient or his/ her relative

I hereby give my consent and authorize Dr. : \_\_\_\_\_  
his or her assistants as may be necessary, to perform the following  
operations / procedures: \_\_\_\_\_

### Type of Anesthesia / Sedation

General  Local/Regional  Intravenous  
 Spinal  Epidural  Other: \_\_\_\_\_

I acknowledge that The nature and purpose of the operation/  
procedure mentioned above, anesthesia (if appropriate), the risks  
involved, the possibility of complications, and possible alternatives  
have been explained to me by Dr. \_\_\_\_\_

I was given the opportunity to ask questions related to my operation/  
procedure and all my questions have been answered, and I have  
agreed to the mentioned operation / procedure.

It, during the contemplated operation, other conditions are discovered  
which requires an extension, alteration, or abandonment of the original  
operation / procedure, or a different operation / procedure, I authorize  
and request that it proceed.

Complications associated with this operation / procedure:

The following applies to surgery in high risk patients only:  
By signing the following portion of the consent I acknowledge that  
I have been fully informed of the high risk associated with the  
operation / procedure and that the possibility of serious morbidity as  
a result of this surgery/ procedure has been explained to me.

Full Name: \_\_\_\_\_  
 Patient  Legal guardian  Relative: \_\_\_\_\_  
 Other: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date & Time: \_\_\_\_\_  
Witness/ Translator (for the above signature)  
Name: \_\_\_\_\_ Signature: \_\_\_\_\_  
Date & Time: \_\_\_\_\_

To be filled by the Physician

I confirm that I have explained and documented in the medical  
records the nature, purpose, alternatives and potential complications  
of the operation / procedure to the above signed as well as  
possible risks associated with anesthesia.  
The opportunity was given to him/ her to ask questions related to  
the operation and those were answered.

Dr. Name: \_\_\_\_\_ Dr's No: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date & Time: \_\_\_\_\_

## موافقة على إجراء عملية جراحية / تدخل طبي

بمجرد من قبل المريض أو قريبه

بهذا أوافق وأخوض الدكتور / المتكورة،  
ومساعديه / مساعديه حسيما تقتضي الضرورة لإجراء العملية / التدخل الطبي،

نوع التخدير:  
 عام  موضعي  بالوريد  
 بالحقن الشوكي  فوق الجافية  أخرى:  
فام الدكتور / المتكورة،  
بشرح طبيعة العملية / التدخل الطبي أعلاه، الهدف منها، التخدير (إذا دعت الحاجة)  
الآخطار الكامنة، المضاعفات، كما تم إضاح بدائل هذا العلاج.

وقد أعطيت لي الفرصة لطرح أي أسئلة متعلقة بالعملية / التدخل الطبي، وقد تمت  
الإجابة عليها والموافقة على هذه العملية / التدخل الطبي.

إذا تغيرت الظروف العادية أثناء إجراء العملية والذي قد يتطلب تعديل مدة العملية  
أو تغيير وإيقاف العملية أو إجراء عملية إضافية - فإنتي أوافق وأخوض وأطلب من  
الإجراءات اللازمة.

المضاعفات المساحبة لهذه العملية / التدخل الطبي:

يتطابق ما يلي على المرض ذي الوضع شديد الخطورة فقط.  
بتوقيصي على حسن، فإنتي أقصر بأنه حسن، تم توضيح كافة المعلومات الخاصة  
بالعملية الجراحية/ التدخل الطبي شديد الخطورة التي سوف تجري لي والاحتمالات  
والنتائج المترتبة على تلك الجراحة/ التدخل الطبي والتي من الممكن أن تسوي إلى  
أضرار جسيمة (لا عذر الله).

الاسم: \_\_\_\_\_  
 المريض  ولي الامر  القريب: \_\_\_\_\_  
 أخرى: \_\_\_\_\_  
التوقيع: \_\_\_\_\_ التاريخ/ الوقت: \_\_\_\_\_  
الشاهد/ المترجم (على التوقيع أعلاه)  
الاسم: \_\_\_\_\_  
التوقيع: \_\_\_\_\_ التاريخ/ الوقت: \_\_\_\_\_

بمجرد من قبل الطبيب

ببصحة أؤكد بأنني قد تمت بشرح طبيعة، البدائل والمضاعفات المحتملة لتلك العملية  
الجراحية / التدخل الطبي للموقع أعلاه، وقد تمت بتوثيق ذلك مع الملف الطبي.

وقد أعطيت له الفرصة لطرح أي أسئلة متعلقة بهذا الإجراء وقد تمت بالإجابة عليها.

اسم الطبيب: \_\_\_\_\_ رقم الطبيب: \_\_\_\_\_  
التوقيع: \_\_\_\_\_ التاريخ/ الوقت: \_\_\_\_\_

# Surgical safety checklist



- <https://www.youtube.com/watch?v=z5foq-6ahXI>

# Surgical safety checklist



Name: \_\_\_\_\_  
 Nationality: \_\_\_\_\_  
 Patient No.: \_\_\_\_\_  
 Sex: \_\_\_\_\_ D.O.B.: \_\_\_\_\_

## Surgical Safety Checklist

Date: \_\_\_\_\_

Time: _____			Time: _____			Time: _____		
SIGN IN - BEFORE INDUCTION OF ANESTHESIA			TIME OUT - BEFORE SKIN INCISION			SIGN OUT - BEFORE PATIENT LEAVES OR		
<b>Pre-operative Verification:</b> 1 <input type="checkbox"/> Correct patient (Wrist Band with name & MRN, DOB) 2 <input type="checkbox"/> Correct site/ site marked (right, left, organ) 3 <input type="checkbox"/> Correct, signed and valid consent 4 <input type="checkbox"/> Correct procedure 5 <input type="checkbox"/> Relevant documentation: History & Physical Assessment, Care & Discharge Plans Pre-op Checklist Anesthetist Record - Pre Operative Assessment Medication Record /Medication Reconciliation 6 <input type="checkbox"/> Correct diagnostic and laboratory test results 7 <input type="checkbox"/> Availability of request for blood and blood products 8 <input type="checkbox"/> Availability of required implants/ device/ special equipments 10 <input type="checkbox"/> Known allergies 11 <input type="checkbox"/> Pre-op medications & antibiotic prophylaxis given 12 <input type="checkbox"/> Communicate anticipated critical events			<b>Carry out a Surgical Pause and confirm from the surgical team:</b> 1 <input type="checkbox"/> Correct patient (Wrist Band with name & MRN, DOB) 2 <input type="checkbox"/> Correct side/ site marked 3 <input type="checkbox"/> Correct procedure and correct patient's position 4 <input type="checkbox"/> Correct relevant images or properly displayed on PACS screen 5 <input type="checkbox"/> Correct implants, devices and special equipment 6 <input type="checkbox"/> Antibiotic prophylaxis given			<b>Post-Op Verification: Nurse verbally confirms with surgeon:</b> 1 <input type="checkbox"/> Confirmation on the procedure performed 2 <input type="checkbox"/> Instruments, needles, sponge and all counts are correct 3 <input type="checkbox"/> All specimens are labelled correctly and correct patient's name 4 <input type="checkbox"/> Any equipment problems to be reported 5 <input type="checkbox"/> Duration of Antibiotic prophylaxis is documented in the physician orders  <b>Remarks:</b> _____ _____ _____ _____		
Name	Signature	Comp. No / Pager No	Name	Signature	Comp. No / Pager No	Name	Signature	Comp. No / Pager No
S*			S*			S*		
A*			A*			A*		
N*			N*			N*		

S\* = Surgeon    A\* = Anaesthetist    N\* = Nurse

# Sign In



Date: \_\_\_\_\_

Time: \_\_\_\_\_

## SIGN IN - BEFORE INDUCTION OF ANESTHESIA

### Pre-operative Verification:

- 1  Correct patient (Wrist Band with name & MRN; DOB)
- 2  Correct site/ site marked (right, left), organ
- 3  Correct, signed and valid consent
- 4  Correct procedure
- 5  Relevant documentation:
  - History & Physical Assessment, Care & Discharge Plans
  - Pre-op Checklist
  - Anesthetist Record - Pre Operative Assessment
  - Medication Record /Medication Reconciliation
- 6  Correct diagnostic and laboratory test results
- 7  Availability of request for blood and blood products
- 8  Availability of required implants/ device/ special equipments
- 10  Known allergies
- 11  Pre-op medications & antibiotic prophylaxis given
- 12  Communicate anticipated critical events

	Name	Signature	Comp. No / Pager No
S*			
A*			
N*			

# Time Out



Time: \_\_\_\_\_

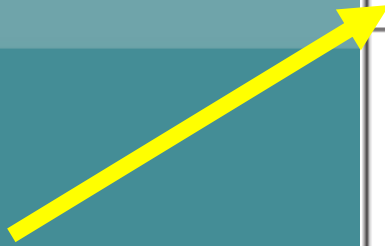
**TIME OUT - BEFORE SKIN INCISION**

Carry out a Surgical Pause and confirm from the surgical team:

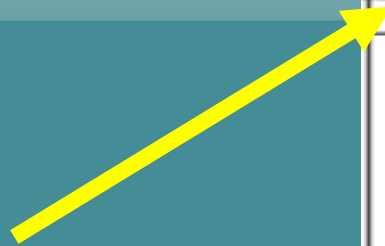
- 1  Correct patient (Wrist Band with name & MRN, DOB)
- 2  Correct side/ site marked
- 3  Correct procedure and correct patient's position
- 4  Correct relevant images or properly displayed on PACS screen
- 5  Correct implants, devices and special equipment
- 6  Antibiotic prophylaxis given

	Name	Signature	Comp. No / Pager No
S*			
A*			
N*			

A\* = Anaesthetist      N\* = Nurse



# Sign Out



Time: \_\_\_\_\_

**SIGN OUT - BEFORE PATIENT LEAVES OR**

**Post-Op Verification: Nurse verbally confirms with surgeon:**

- 1  Confirmation on the procedure performed
- 2  Instruments, needles, sponge and all counts are correct
- 3  All specimens are labelled correctly and correct patient's name
- 4  Any equipment problems to be reported
- 5  Duration of Antibiotic prophylaxis is documented in the physician orders

Remarks:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

	Name	Signature	Comp. No / Pager No
S*			
A*			
N*			

OR-01



# Done by whom?



Surgical  
consent form

Physician (senior /  
consultant )

•

Pre-operation  
checklist

Nurses •

Surgical  
safety  
checklist

nurses, surgeons, •  
anesthesiologists



# Practice \Techniques in Operating Room that Reduce Risks and Errors



- Comply with the surgical checklist
- Participating in team briefings and debriefings
- Appropriately sharing information
- Asking questions
- Stating or sharing intentions
- Teaching
- Managing workload

# Summary



- Adherence to infection control policy
- Importance implementation of surgical guidelines
- Health-care professionals need to understand the reasons for the guidelines
- Protocols and verification steps can minimize mistakes in patient identity
- The use if everyday techniques can improve communication and minimize errors



THANK  
YOU  
AND  
WISH YOU  
ALL THE BEST

