

# THE COMPLIANCE OF SURGICAL SAFETY CHECKLIST AT WEST WING OPERATION THEATRE COMPLEX ,MAX HOSPITAL SAKET,NEW DELHI



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## INTRODUCTION

- ◆ WHO surgical safety checklist is used worldwide in operation theatres for safety of patients.
- ◆ Max Super Specialty Hospital,Saket is using it religiously in Operation theatres for the last 6 years.
- ◆ It has been made mandatory in all procedures performed outside operating room where anesthesia services are provided.

## SIGNIFICANCE OF A SAFETY CHECKLIST

- ⇒ Reinforces accepted safety practices
- ⇒ Fosters better communication and teamwork between clinical disciplines.
- ⇒ Improves the safety of operations
- ⇒ Avoids inadequate anesthetic safety practices
- ⇒ Reduces avoidable surgical infection
- ⇒ Reduces unnecessary surgical deaths and complications

## AIMS AND OBJECTIVES

- \* To check the compliance of WHO surgical safety checklist in the West wing operation theatre complex of Max Hospital , Saket.
- \* To analyze its compliance in the various surgical departments of the West wing operation Theatre complex.
- \* To study the entire process flow of the patients inside the operation theatre.
- \* To search the areas of problem and find the reasons for the same
- \* To give recommendations for the further improvement in the surgical safety of patients.

## METHODOLOGY

**Type of study :** Observational cross-sectional

**Study population :** Surgery patients, surgeons, anaesthetists, OT nurses, OT technicians

**Study area :** Operation theatre complex, Max Hospital, West wing, Saket, Delhi

**Duration of Study :** 1 Month

**Type of Data :** Quantitative

**Technique :** Direct observation of the surgery patients, surgeons, anaesthetists, OT nurses and technicians.

**Tool :** Checklist

**Sample size :** 100 surgical patients with surgeries under GA according to the convenience.

**Sampling technique–** convenience sampling

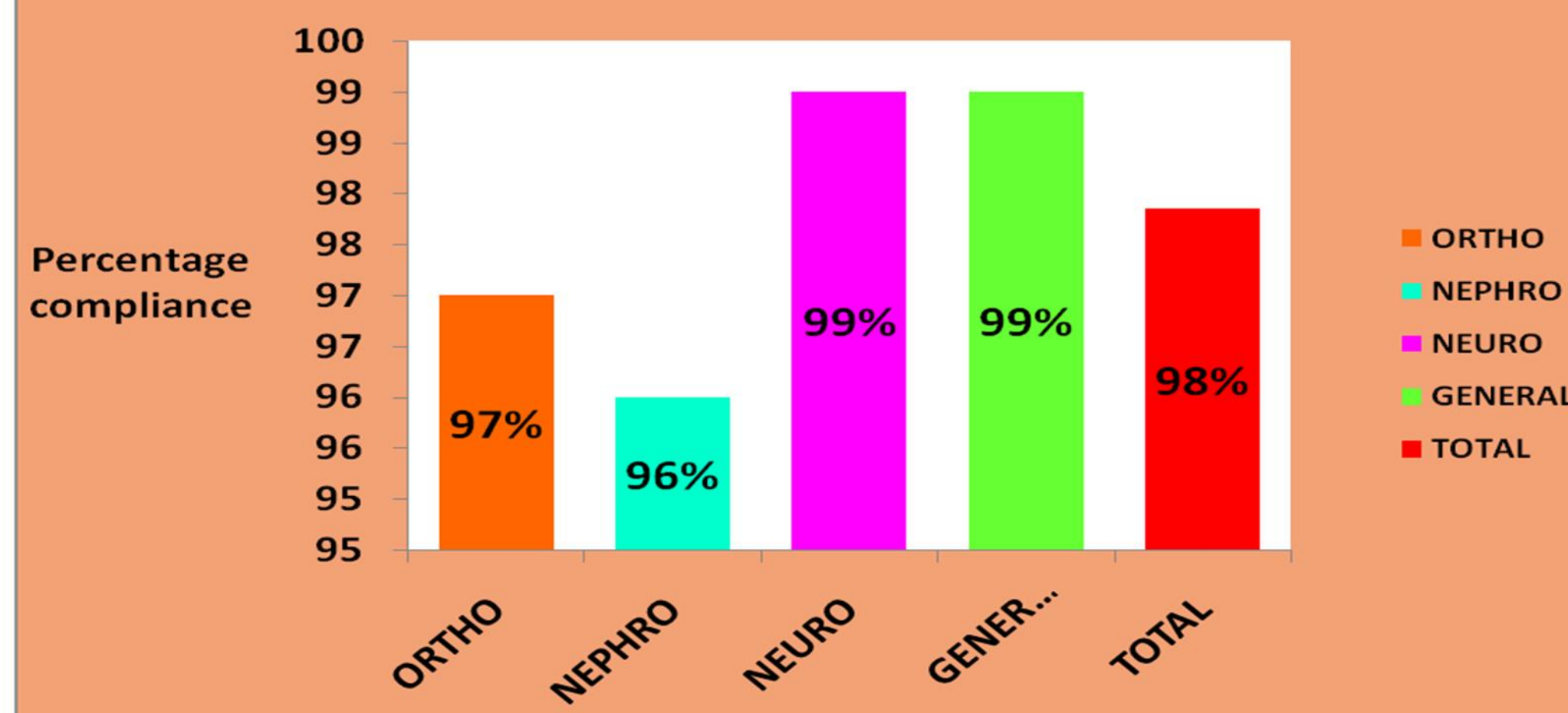
**Inclusion criteria–** All Patients in the operation theatre undergoing surgeries under GA, anaesthetists, surgeons, nurses in the West wing operation theatre.

**Data collection -** Quantitative (1Month)

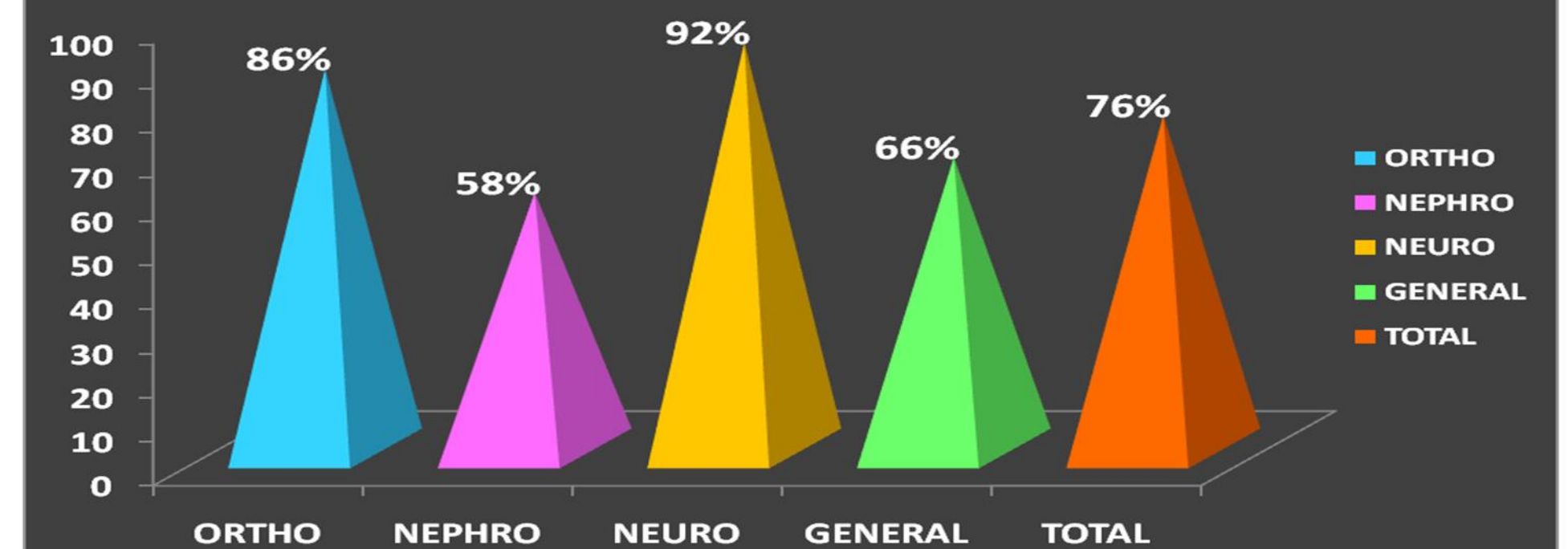
**Data Analysis–** The checklist was divided into four domains; **Sign in, Time out, Sign out and Documentation.** There were 16 elements under these 4 domains. Each element was given score 1 for the compliance and 0 for non compliance. The findings are represented with the help of bar graphs and pie charts.

## DATA ANALYSIS

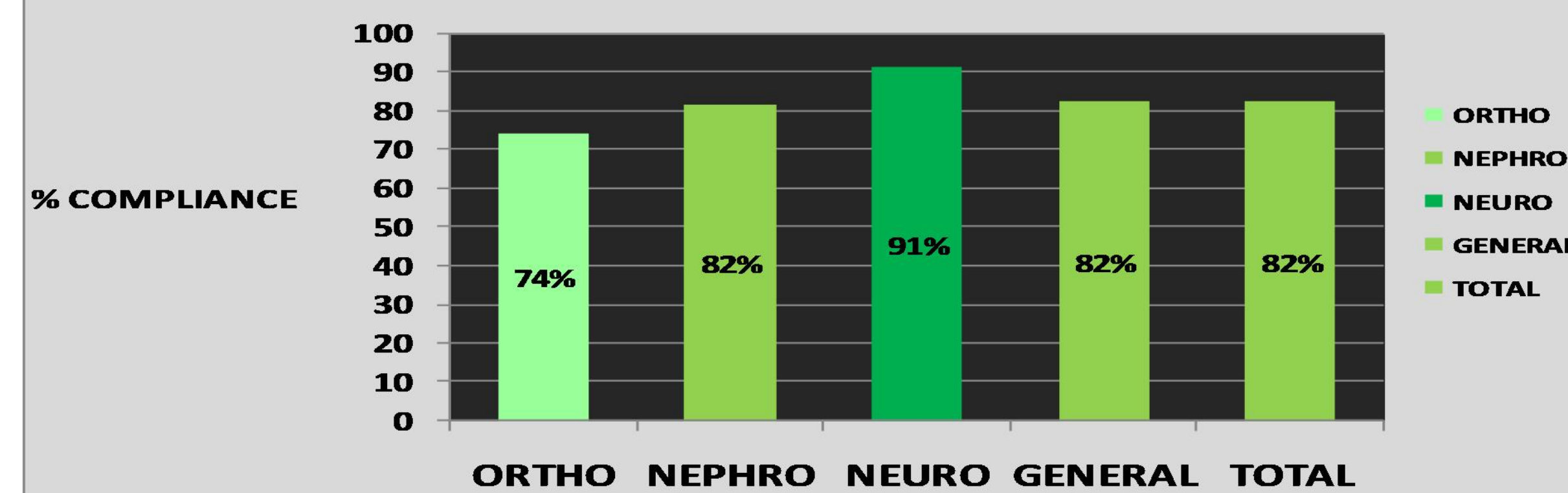
COMPLIANCE OF THE SIGN-IN IN THE WEST BLOCK OT



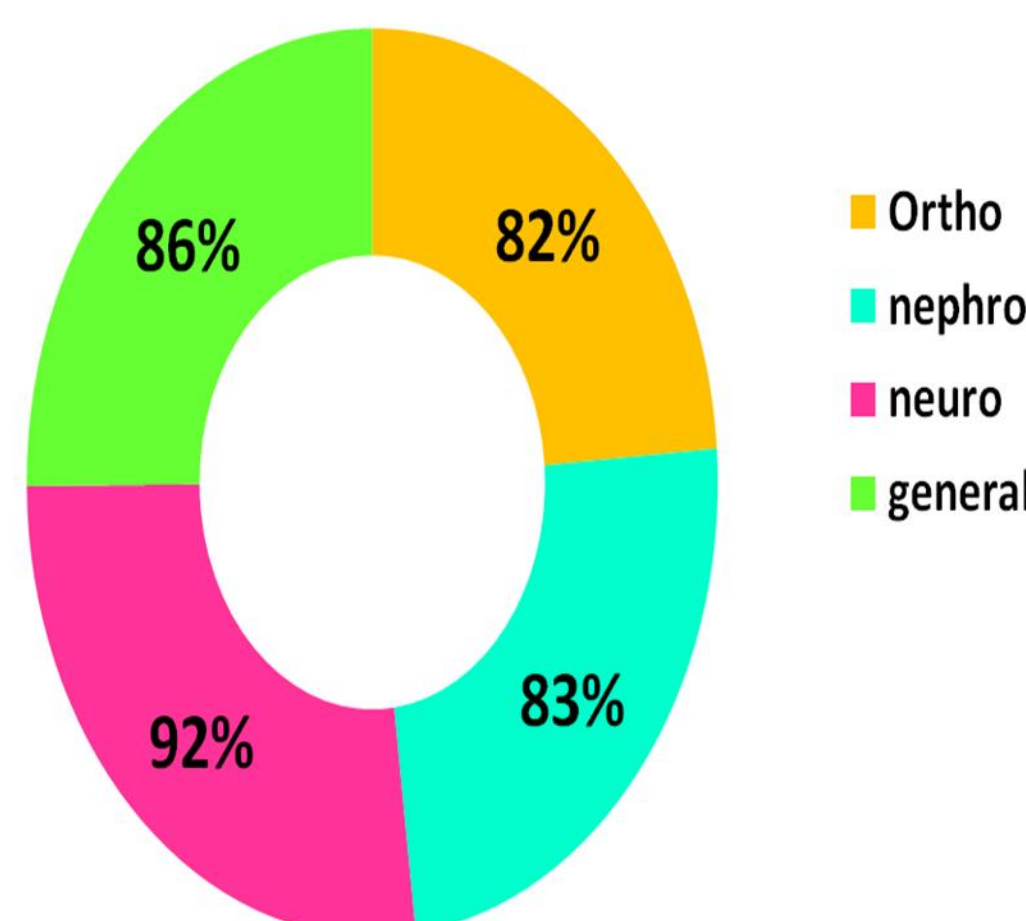
COMPLIANCE OF THE DOCUMENTATION IN THE WEST BLOCK OT



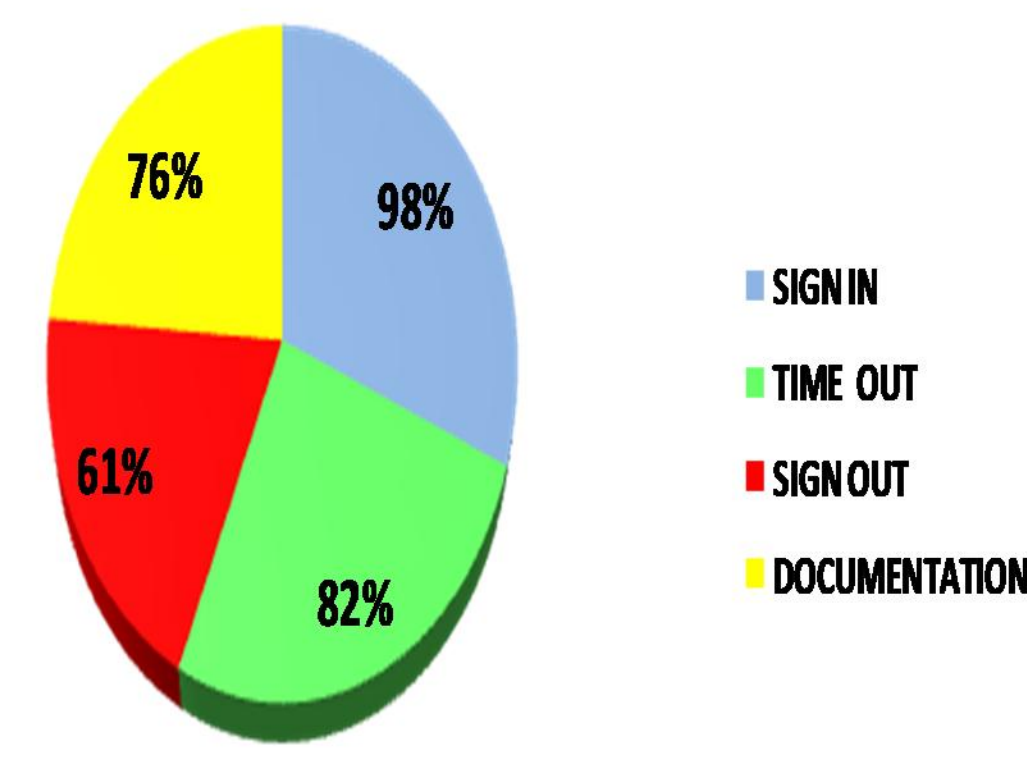
Compliance of the time-out in the West Block OT



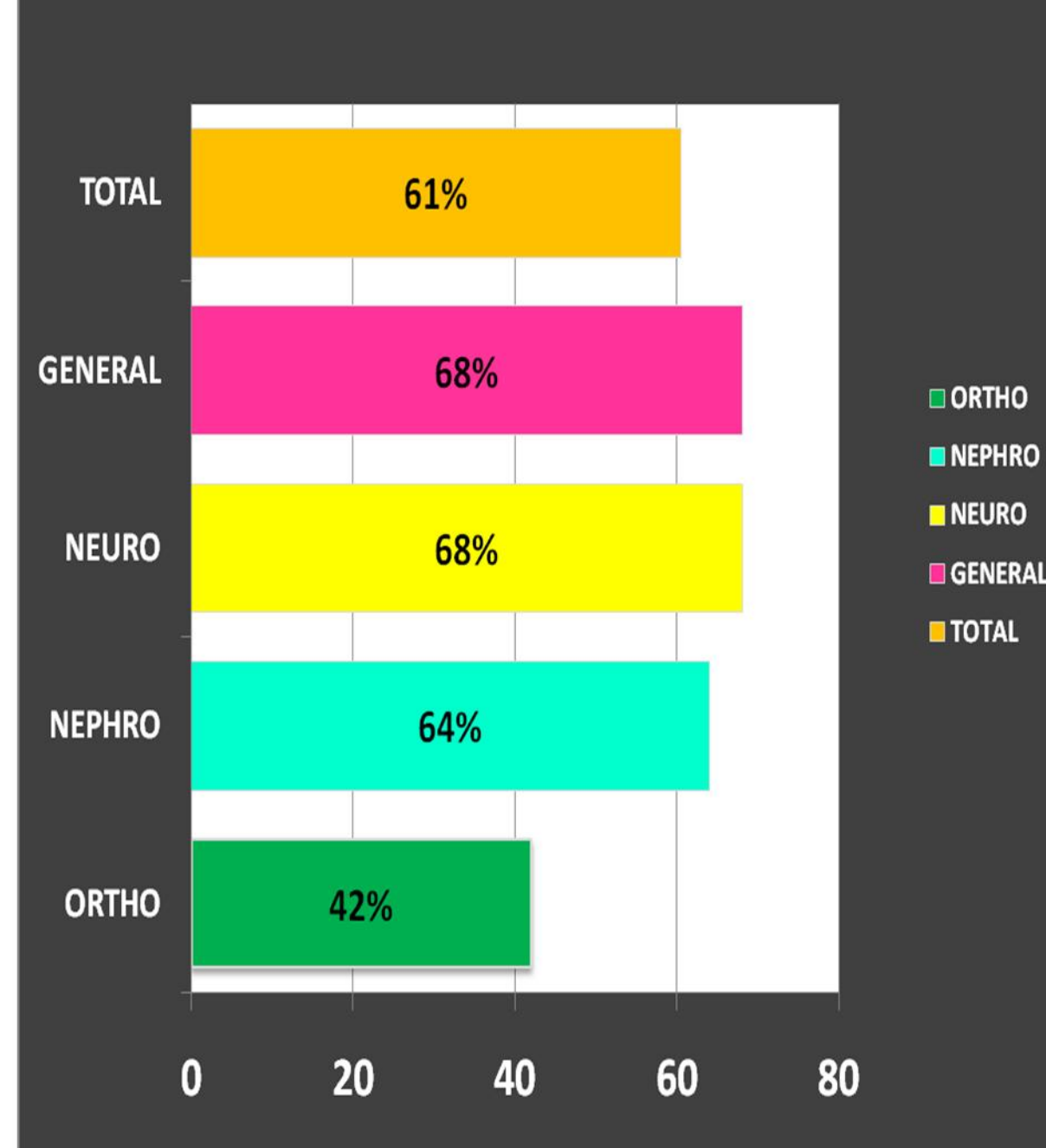
COMPLIANCE OF THE SURGICAL SAFETY CHECKLIST IN VARIOUS DEPARTMENTS OF THE WEST BLOCK OT



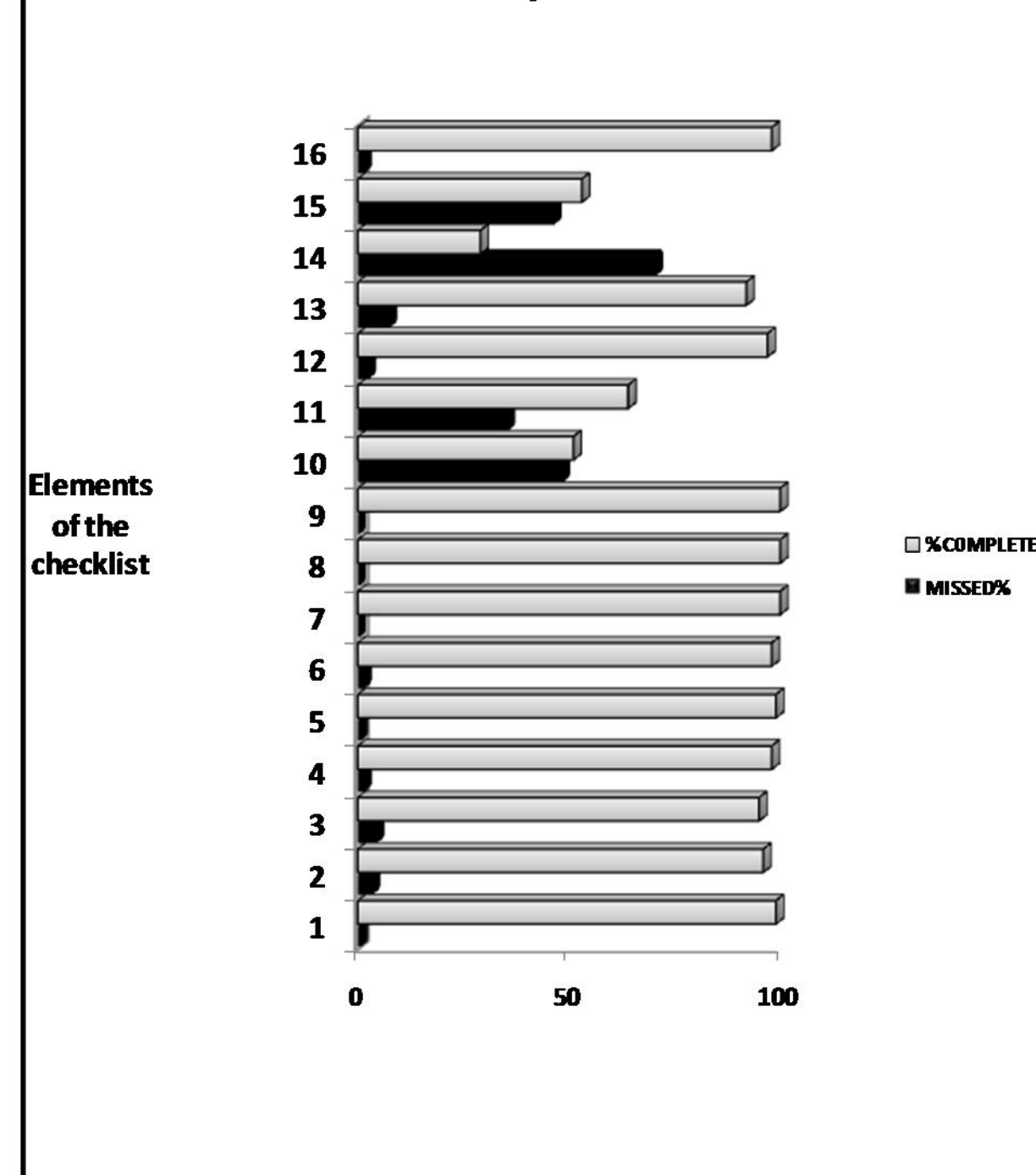
The compliance of the surgical safety checklist in the west block OT



COMPLIANCE OF THE SIGN OUT IN THE WEST BLOCK OT



Missed and completeness %



## RESULTS

\*The compliance of the surgical safety checklist in the West wing operation theatre Complex, Max Hospital, Saket is 86%.

\*There are highly satisfactory results associated with the sign-in and the compliance is 98%

\*The compliance of time-out, sign-out and documentation is 82%, 61%, 76% respectively.

\*There are three elements of the checklist which have shown 100% compliance and the completeness.

\*Element number 14; the key concerns for recovery and management of the patient is 29% compliant.

\*The Department of Neurology has shown maximum contribution towards the safety measures of the patient in the OT and has obtained maximum score of 368 whereas ortho department has shown minimum contribution with a score of 326. This score was out of 400.

## RECOMMENDATIONS

◆ Gap between knowledge and practice needs to be bridged. Greater awareness and education is required

◆ The surgeons, anesthetists, nurses and OT technicians should take it as seriously as they take surgeries. There should be training modules to encourage such attitude.

◆ There was a gap seen in the antibiotic prophylaxis given during the surgery. A proper monitoring is required in this area for the patient safety and better quality standards.

◆ Validated evidence based initiatives need to be strongly emphasized and published.

◆ The departments like ortho and general surgeries need more staff to maintain the standards of quality due to high work load.

◆ There should be a proper monitoring during the Time-Out and Sign-Out, the recorded videos should be analyzed to check the important gaps which are usually missed during the audit.

◆ The OT is headed by the clinical staff, an association of an OT manager inside the OT can bring significant changes to the current scenario.

## Surgical Safety Checklist



| Before induction of anaesthesia<br>(with at least nurse and anaesthetist)                                                                                                                                                                                                                                                                                                                                                                       | Before skin incision<br>(with nurse, anaesthetist and surgeon)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Before patient leaves operating room<br>(with nurse, anaesthetist and surgeon)                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Has the patient confirmed his/her identity, site, procedure, and consent?<br><input type="checkbox"/> Yes<br><input type="checkbox"/> No                                                                                                                                                                                                                                                                               | <input type="checkbox"/> Confirm all team members have introduced themselves by name and role.<br><input type="checkbox"/> Confirm the patient's name, procedure, and where the incision will be made.<br><input type="checkbox"/> Has antibiotic prophylaxis been given within the last 60 minutes?<br><input type="checkbox"/> Yes<br><input type="checkbox"/> Not applicable                                                                                                                                                                   | <input type="checkbox"/> Nurse Verbally Confirms:<br><input type="checkbox"/> The name of the procedure<br><input type="checkbox"/> Completion of instrument, sponge and needle counts<br><input type="checkbox"/> Specimen labelling (read specimen labels aloud, including patient name)<br><input type="checkbox"/> Whether there are any equipment problems to be addressed |
| <input type="checkbox"/> Is the site marked?<br><input type="checkbox"/> Yes<br><input type="checkbox"/> Not applicable                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> Anticipated Critical Events<br>To Surgeon:<br><input type="checkbox"/> What are the critical or non-routine steps?<br><input type="checkbox"/> How long will the case take?<br><input type="checkbox"/> What is the anticipated blood loss?<br>To Anaesthetist:<br><input type="checkbox"/> Are there any patient-specific concerns?<br>To Nursing Team:<br><input type="checkbox"/> Has sterility (including indicator results) been confirmed?<br><input type="checkbox"/> Are there equipment issues or any concerns? | <input type="checkbox"/> To Surgeon, Anaesthetist and Nurse:<br><input type="checkbox"/> What are the key concerns for recovery and management of this patient?                                                                                                                                                                                                                 |
| <input type="checkbox"/> Is the anaesthesia machine and medication check complete?<br><input type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Is essential imaging displayed?<br><input type="checkbox"/> Yes<br><input type="checkbox"/> Not applicable                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                 |
| <input type="checkbox"/> Is the pulse oximeter on the patient and functioning?<br><input type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                 |
| <input type="checkbox"/> Does the patient have a:<br>Known allergy?<br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br>Difficult airway or aspiration risk?<br><input type="checkbox"/> No<br><input type="checkbox"/> Yes, and equipment/assistance available<br>Risk of >500ml blood loss (milking in children)?<br><input type="checkbox"/> No<br><input type="checkbox"/> Yes, and two IVs/central access and fluids planned |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                 |

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Revised 1 / 2009

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CONTRIBUTION OF EACH DEPARTMENT IN MAINTAINING THE QUALITY STANDARDS IN PATIENT SAFETY

