DISSERTATION

AT

OCTAVO SOLUTIONS PVT LTD,
NEW DELHI

"A Study on Gap Analysis of District Hospital, Bulandshahr"

PROJECT GUIDE
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INTRODUCTION OF STUDY

- Gap analysis is the initial step in the review of the available service delivery system.
- It is an efficient base to implement a modern management system.
- It can be measured against pre set standards.
- It reveals the areas of improvement in the existing service system.
- It focuses on the components of the management services and how effective they are.

OBJECTIVES

- To assess the existing service delivery status of the hospital
- To identify the gap, if any, as per NABH guidelines.
- To suggest viable recommendations for bridging the gaps in departments based on customized requirements for the hospital.
- To help the hospital management and UP. Govt. to take appropriate managerial decisions to improve the quality of their services.

METHODOLOGY

Study Design:-

non-experimental observational study

Data collection tools:-

- Interview and discussions with staff and head of the departments.
- Checklists
- Observation Using available information
- NABH tool kit

Study Time:-

2 months

Primary data:

Direct observation

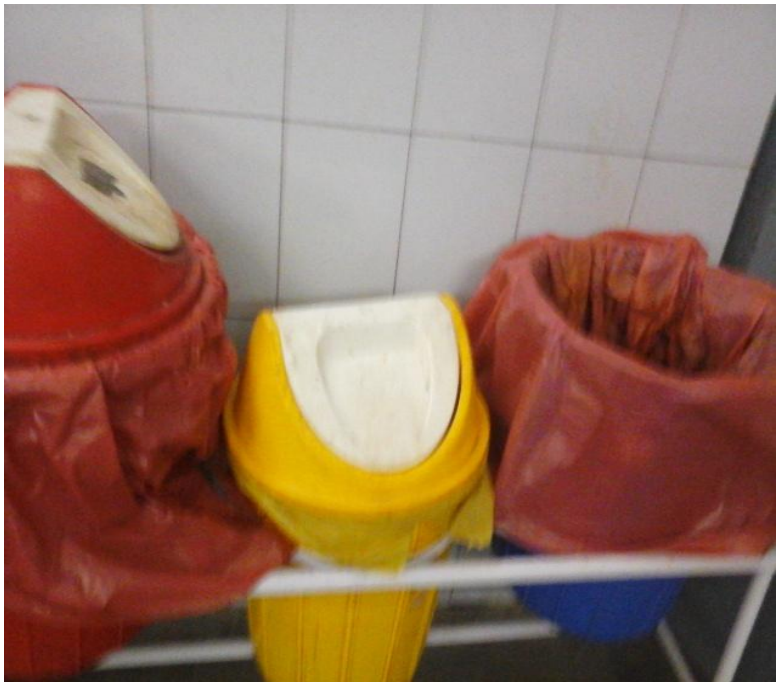
Interview

Secondary Data:

Records of various departments

GAP ANALYSIS

MAJOR GAPS



BMW practices not being followed properly

Hand washing area in main OT

Small rooms for medical records

Seepage in main store

TSSU corner in OT

Mismanagement of crowd and seepage problems in wards

OPD

- List of doctors, OPD timing were not displayed bilingually.
- Citizen charter and patient charter is not displayed
- Calibration of equipments is not done.
- UHID is not generated for all patients.
- Separate registration is not done for old and new patients.

Following indicators were not captured properly

- Patient satisfaction
- Waiting time of OPD patients

EMERGENCY & AMBULANCE DEPARTMENT

- Triage area is not marked separately.
- Emergency signage is not visible from road side.
- Nurse and qualified staff member is not available round the clock.
- Oral airways, Laryngoscope, Endotracheal tubes are not available.
- BMW is not segregated and handled properly.
- Staff is not trained BLS/ACLS.
- Time for initial assessment is not monitored.
- In Ambulance adequate communication system, medicines, equipments, checklists, oxygen is not available.

LABORATORY

- Scope of the services is not defined and displayed at the entrance.
- Critical results are not defined, reported, and documented.
- EQAS is not being monitored.
- MOU is not available for outsourced tests.

Following need to be monitored-

- Turnaround time for investigations
- No. of reporting errors/1000 investigations,
- percentage of Redo's
- percentage of reports correlating with clinical diagnosis
- percentage of employees adhering to safety precautions working in diagnostics

RADIOLOGY AND IMAGING

- **STRUCTURAL**
- Unit has no AERB(SITE\TYPE approval)
- Calibration of equipments was not evident.
- Thyroid shields , gonad shields, TLD badges are not available.
- Changing room is not there.
- Critical results are not defined, reported and documented.
- **PROCES**
- Maintenance and calibration of equipments is not done.
- Quality assurance & safety manual are not available.
- Staffs are not trained uniformly on radiation safety measures.
- Health check up of staffs was not evident.
- Radiology test requisition form and reports are not signed by doctors.
- **OUTCOME**
- No monitoring of quality indicators like number of reporting errors/1000 investigations, percentage of re-dos, percentage of reports correlating with clinical diagnosis, percentage of employees adhering to safety precautions, percentage of contrast related reactions.
- Turnaround time for investigations is not monitored.

OPERATION THEATER

- HVAC system is not present in OT.
- Proper zoning concept as per the standard guidelines is not followed.
- There is no crash cart in OT.
- Physical environment of OT(temp. air, pressure) not maintained.
- No documented sop(informed consent, anaesthesia,pian mgt.) for the operation theatre
- Surgical safety checklist is not available.
- OT booking is not done and list is not made.
- No monitoring of anaesthesia related events like percentage of modification of anaesthesia plan, percentage of unplanned ventilation following anaesthesia, anaesthesia related adverse events and anaesthesia related mortality rate.
- Percentage of surgical site infections, rescheduling and re-exploration rate are not monitored.

ICU

- Equipments (Defib, monitors, ventilators, crash cart) were not available.
- Fowler's bed s are not available.
- No documented SOP for ICU
- No documented quality assurance and infection control programme available.
- Staff is not trained
- High risk medication list is not available.
- No documented policies & procedures
- Scope of paediatric services is not defined and displayed.
- Adequate PPEs are not available
- Care plan and treatment orders are not signed, named, timed & dated by doctors.

Following are not monitored

- re-admission rates
- re-intubation rates
- Medication error
- ICU utilization

BLOOD BANK

- Nurse is not present.
- Bilingual signage are not there.
- Separate counselling section is not present.
- Patients are not educated and given counselling.
- Policies and procedures unavailable.
- Blood transfusion committee is not formed.
- Work instructions are not displayed.

Following rates are not monitored-

- Transfusion reactions.
- Blood and products wastage.
- Turnaround time.
- Component usages.

Medical record department

- Sufficient space, ventilation and fire fighting system is not available in MRD.
- No qualified ,MRD technician is there.
- Racks, tables, chairs are not present in the department.
- Functional flow(receiving, assembling etc). of department is not followed.
- ICD coding method is not used and retrieval of records is not easy.
- MRD committee is not formed, audits are not done, forms and formats are not standardized.

Following are not monitored

- percentage of medical records not having discharge summary,
- percentage of medical records not having initial assessment
- percentage of medical records having incomplete and/or improper consent
- Percentage of missing records

PHARMACY

- Lack of adequate ventilation, lighting security in the department.
- Refrigerator for storing medicines at 2-8 degree temp is not available.
- Provision for storage for narcotic drugs is not there.
- Items are not labelled and arranged alphabetically.
- Sound inventory control and pest control practices are not followed.
- There is no drug therapeutic committee and ADRs are not monitored in the hospital.

Following are not monitored

- Percentage of stock out including emergency drugs,
- percentage of local purchase,
- Incidence of variation from the procurement process
- Percentage of goods rejected before preparation of GRN.

BIO-MEDICAL WASTE MANAGEMENT

- Appropriate colour coded bins with colour plastic bags were not evident uniformly.
- Display of work instructions are not there.
- Housekeeping staffs handling BMW are not provided with PPE.
- Unavailability of safe mode of transportation.
- There is no proper segregation in terms of colour coding in the temporary storage area.
- No labelling of biohazard symbol in the BMW buckets as per the schedule III of biomedical waste management handling rules, 1998 were evidenced.
- No provision for regular health checkups for staff.

ENGINEERING AND MAINTENANCE

Various statutory requirements are not fulfilled-

- Fire
- Diesel
- Liquid oxygen and storage of medical cylinders
- Boiler
- Up to date drawing, layout, escape route is not present and displayed.
- Designated individual for maintenance is present.
- Unavailability of personal safety devices.
- No mechanism for renewal of licences.
- Preventive and breakdown maintenance plan is not implemented.
- Water quality reports are not monitored.
- There is no safety committee in the hospital.
- No trainings and mock drills for staff on disaster and fire safety.

Recommendations

- Documented policy and procedures are needed to be developed and followed.

- Emergency Department is required to be **well equipped to deal acute Emergency**. **Triaging of emergency patients is required to be established**. Training is required to be given to the Emergency staff with regard to the **Emergency practices** (BLS, Head injury management, Shock management, poly trauma management etc.

- **Essential equipments & Accessories such as** crash cart, Ventilators, Suction Apparatus trolley, Monitors, Intubation Set, Emergency tray are required to be made available in most of the patient care areas.

Cont.

- **There has to be a system of allotting Unique ID numbers** for each patient at the time of OPD Registration.

- Relevant licenses and statutory requirements are to be obtained Viz- NOC fire safety, AERB approval, BMW license etc.

- The maintenance of the hospital building, premises and equipments is to be done periodically and hence are in decaying condition. None of the equipments have calibration details except Pathology Department' equipment; AMC details and history cards are not being maintained.

- There has to be a system of auditing of patient care services through a structured tool. **Medical audit, clinical audit, and nursing audit, death audit is to be regularly carried out.**

Cont.

- **Medical Records Department is to be well established** and hence essential statistical information is not captured. Standard form & formats are not being used.

- Record management for decision making was not evidenced. Clinical as well managerial data are to be maintained by the medical record department. **There is no Trained and Qualified MRO available**.

- **Microbiology department not available**. Surveillance programme in high risk area is to be initiated and feedback regarding growth, infection rates, and trends are to be provided to respective units.

- There is no dedicated sterilization unit for the equipments/accessories. A **dedicated Centralized** sterilization unit is recommended for better infection control practices.

Cont.

- There is no arrangement for treatment of infected liquid waste. There is no Sewage treatment plant available for managing body fluids, infected liquid wastes.

- The Surgical suites needs to be planned with due consideration of **four well defined zones of varying degree of cleanliness.** Zoning of OT was not done with four distinct zone i.e., Protective, Clean, Sterile and disposal zones. There was no **HVAC system** in the OT.

- Important forms and formats are not available in the medical records. (Preoperative checklist, post operative checklist, Consent forms for anesthesia and surgery, Blood transfusion consent, TPR chart)

Cont.

- **The knowledge and practices about BMW management** is required to be strengthened and needs repeated training and monitoring of the staff. Bins in used needed to be cleaned and disinfected at regular intervals.

- There has to be documented disaster management plan for the hospital. Since plan is not available hence no awareness of key staff for their roles and responsibility during the disaster situations.

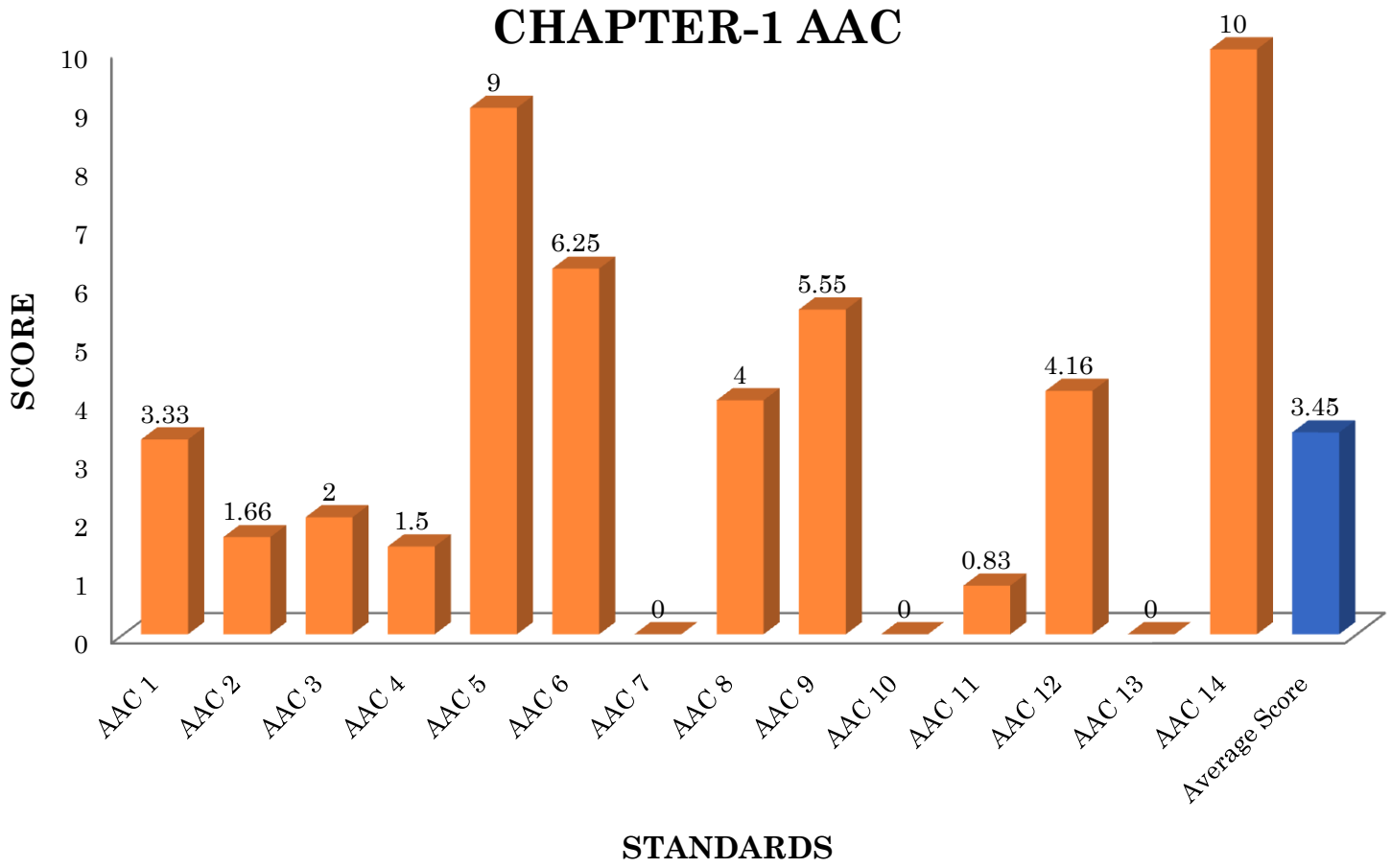
- There has to be a system of **External Quality Assurance for** diagnostic services.

Score analysis

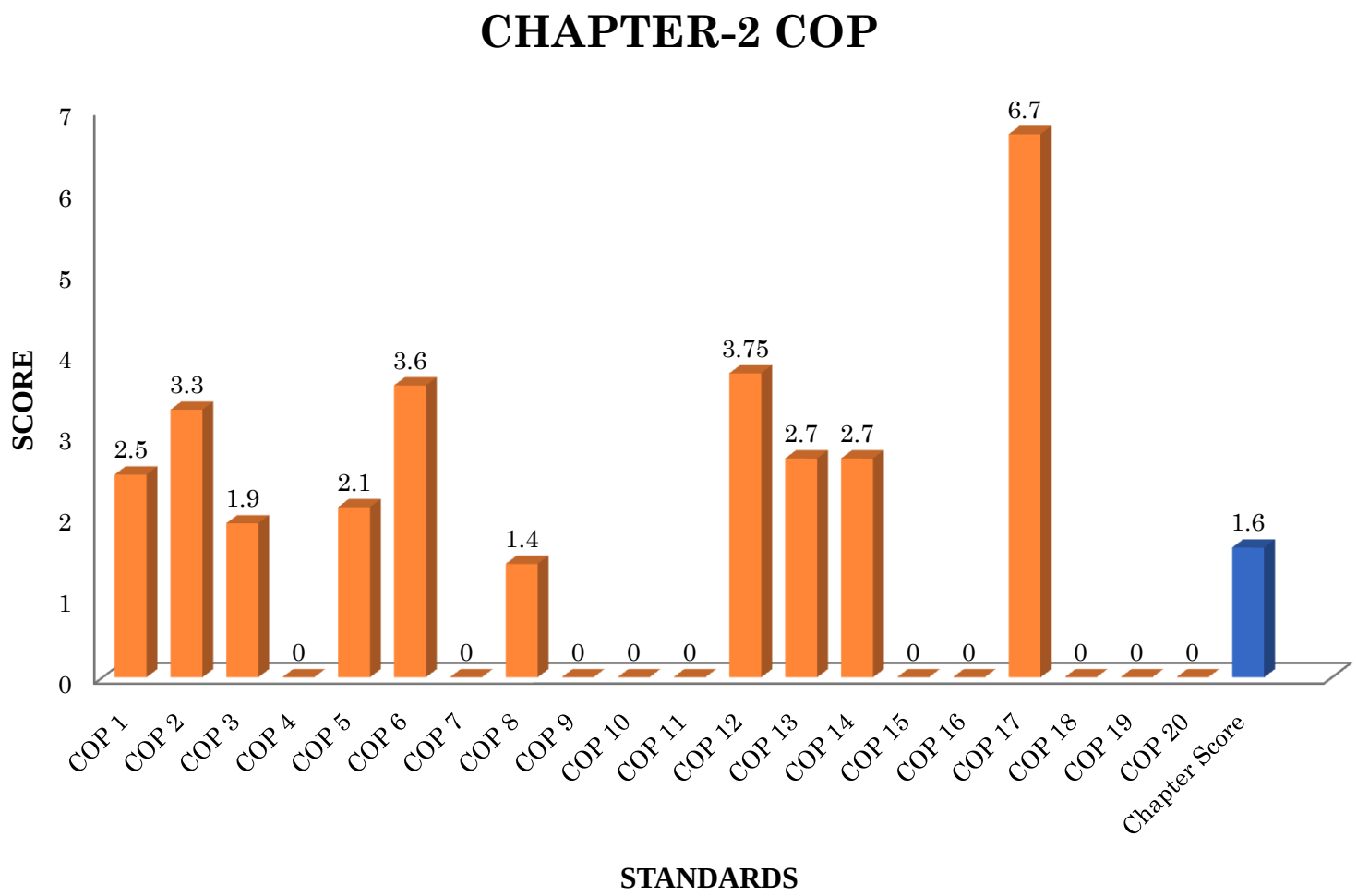
After filling up of the NABH self- assessment toolkit the following scores were calculated:

- The average score of each individual standard
- The average score of all standards
- The average score of each chapter

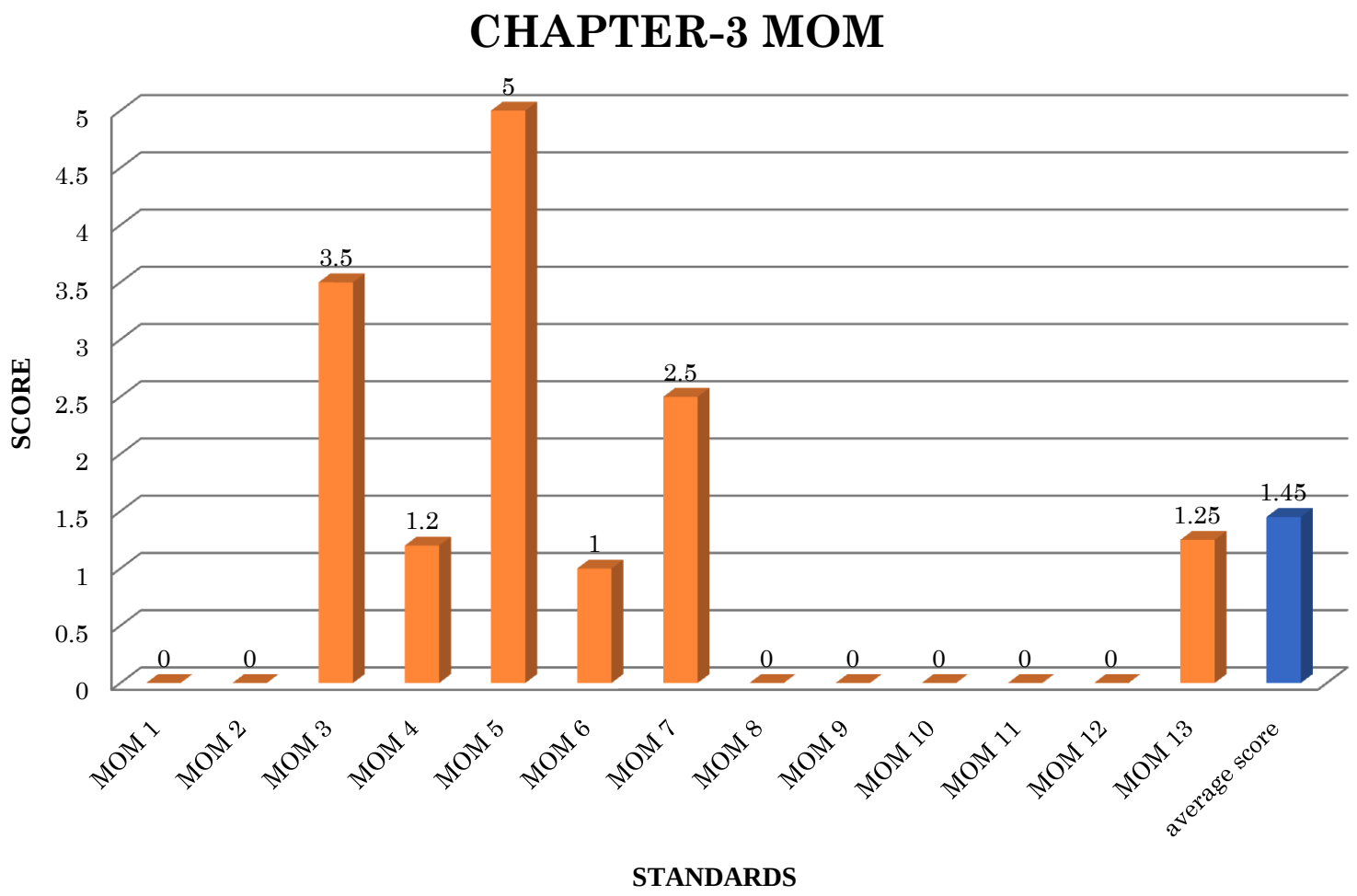
STANDARDS OF CHAPTER 1



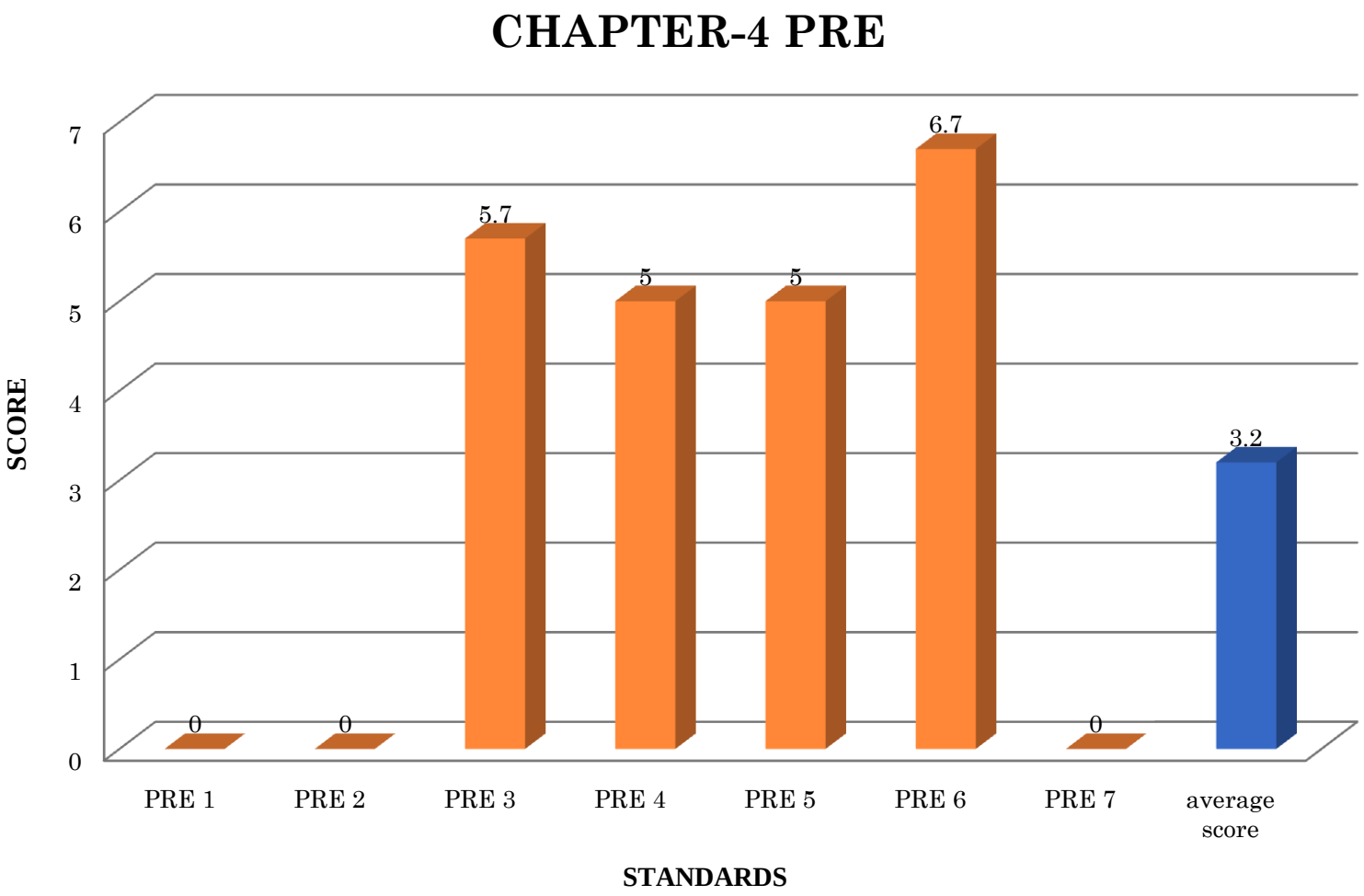
STANDARDS OF CHAPTER 2



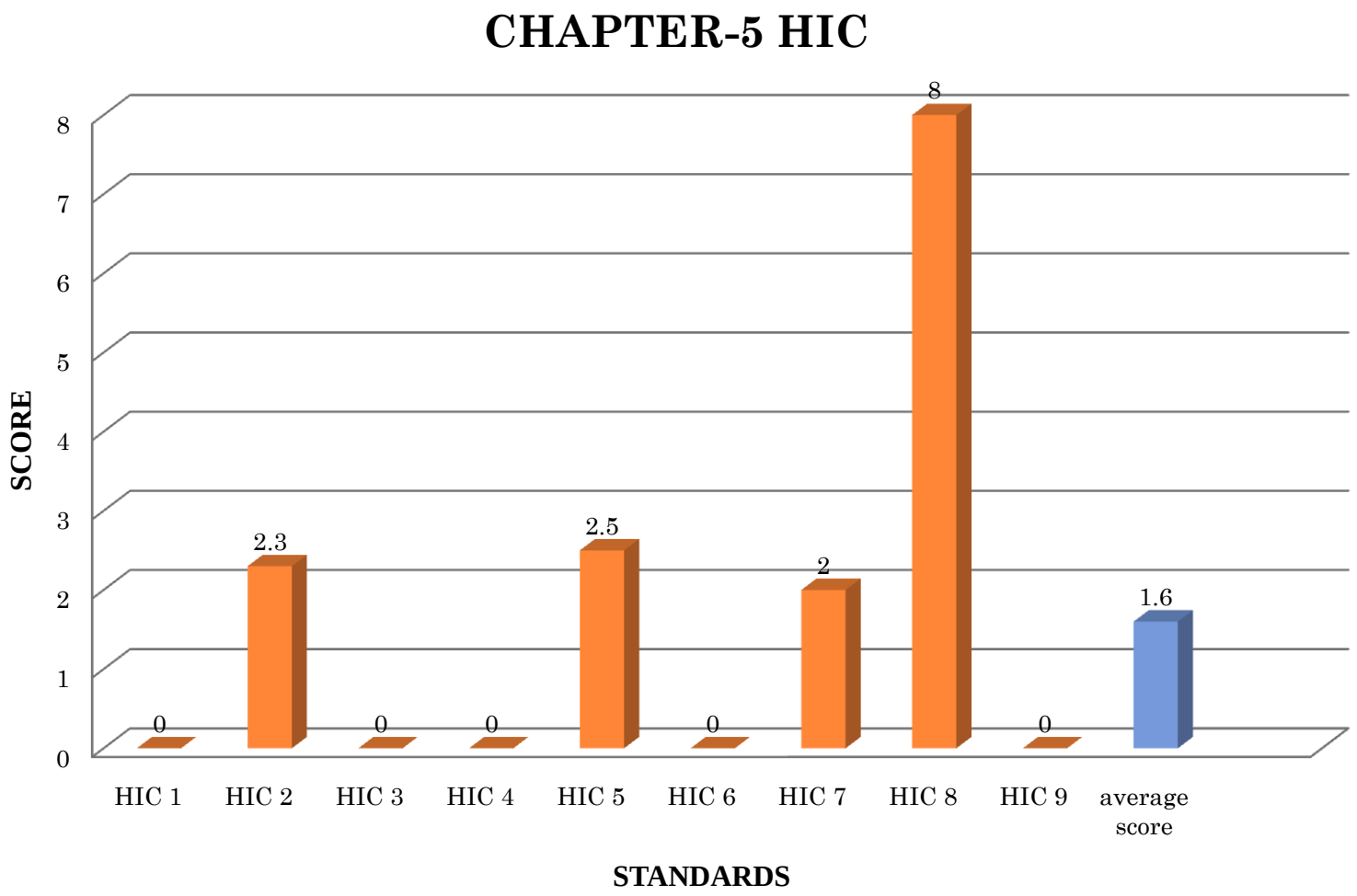
STANDARDS OF CHAPTER 3



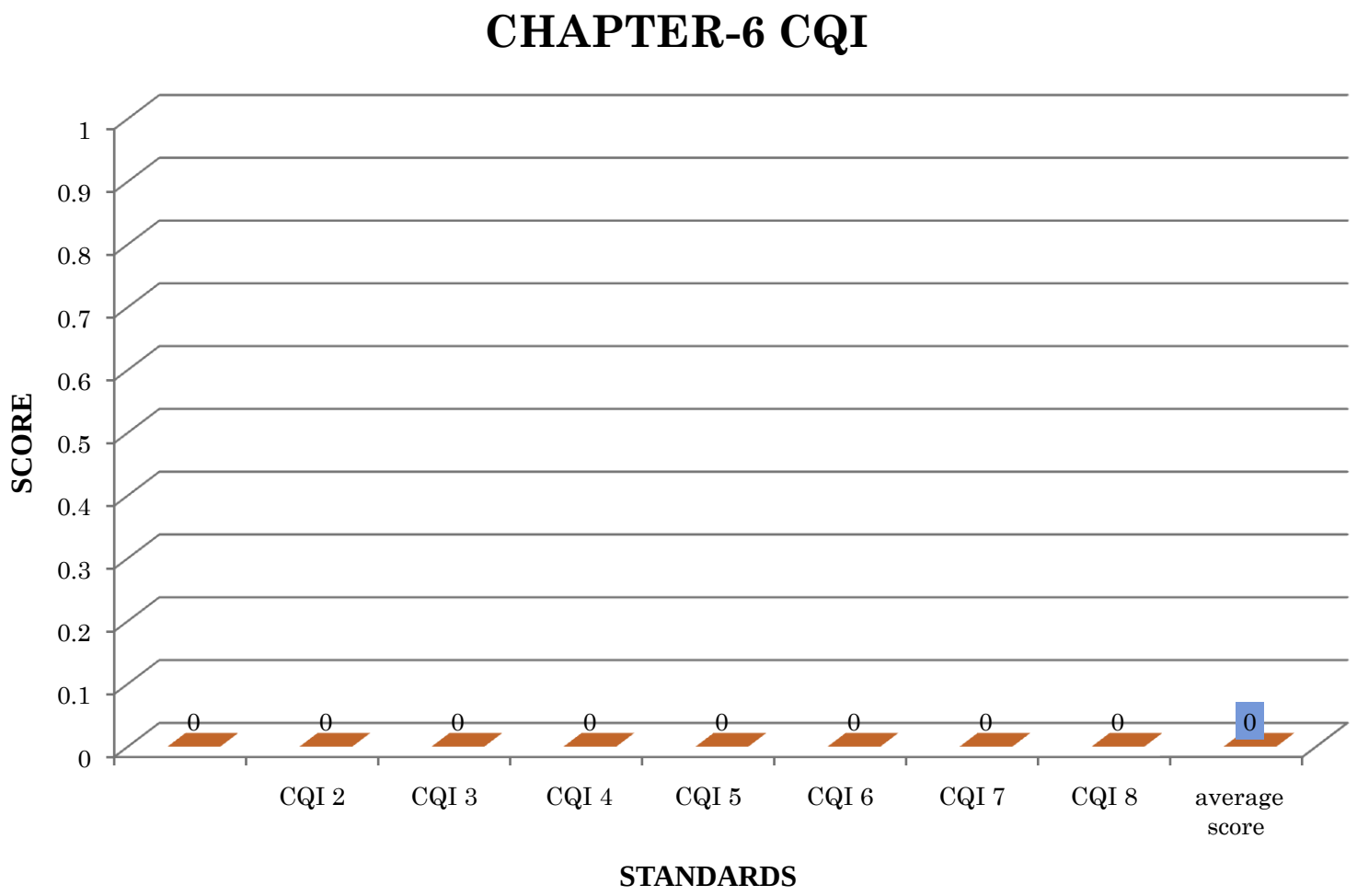
STANDARDS OF CHAPTER 4



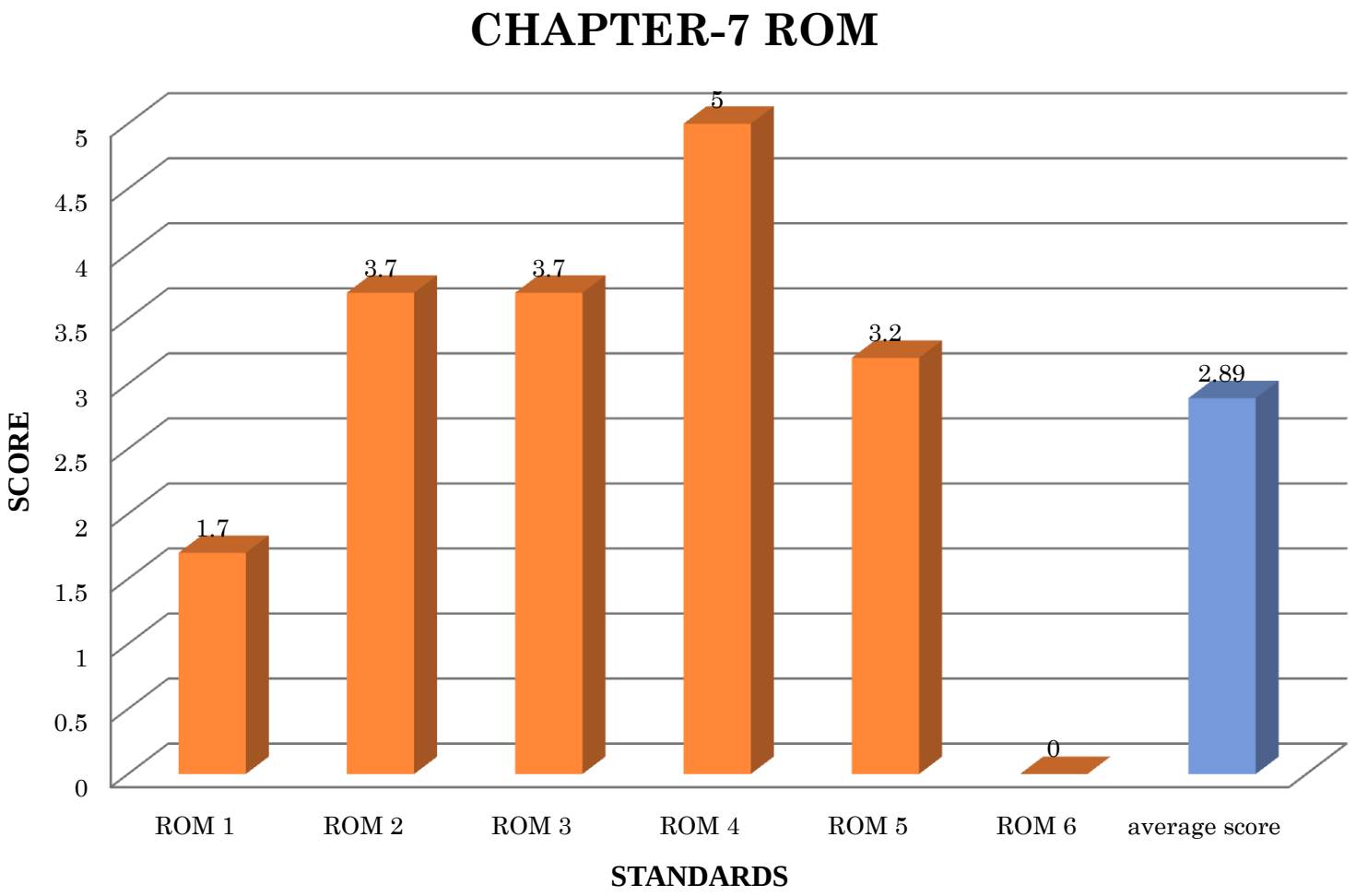
STANDARDS OF CHAPTER 5



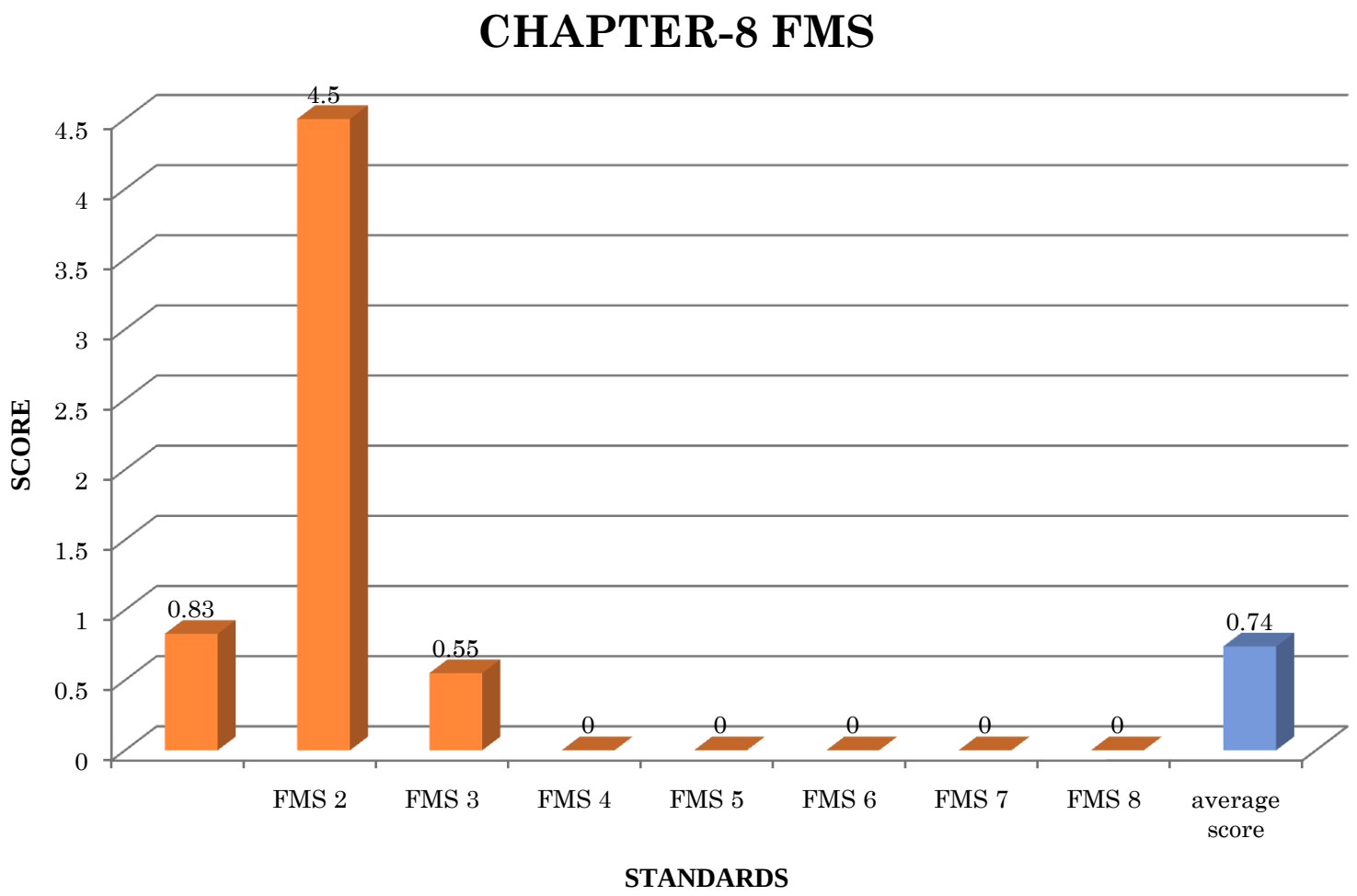
STANDARDS OF CHAPTER 6



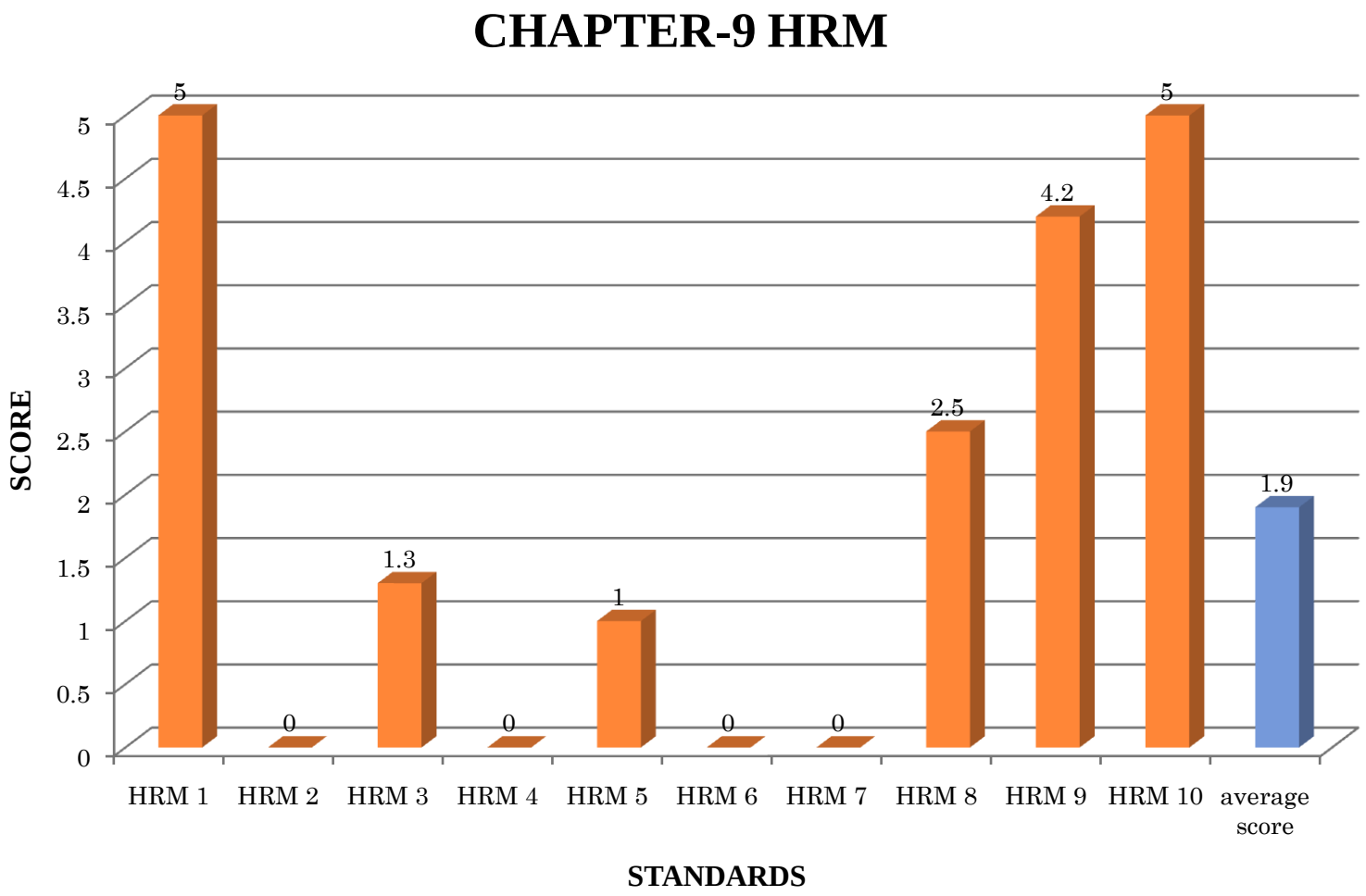
STANDARDS OF CHAPTER 7



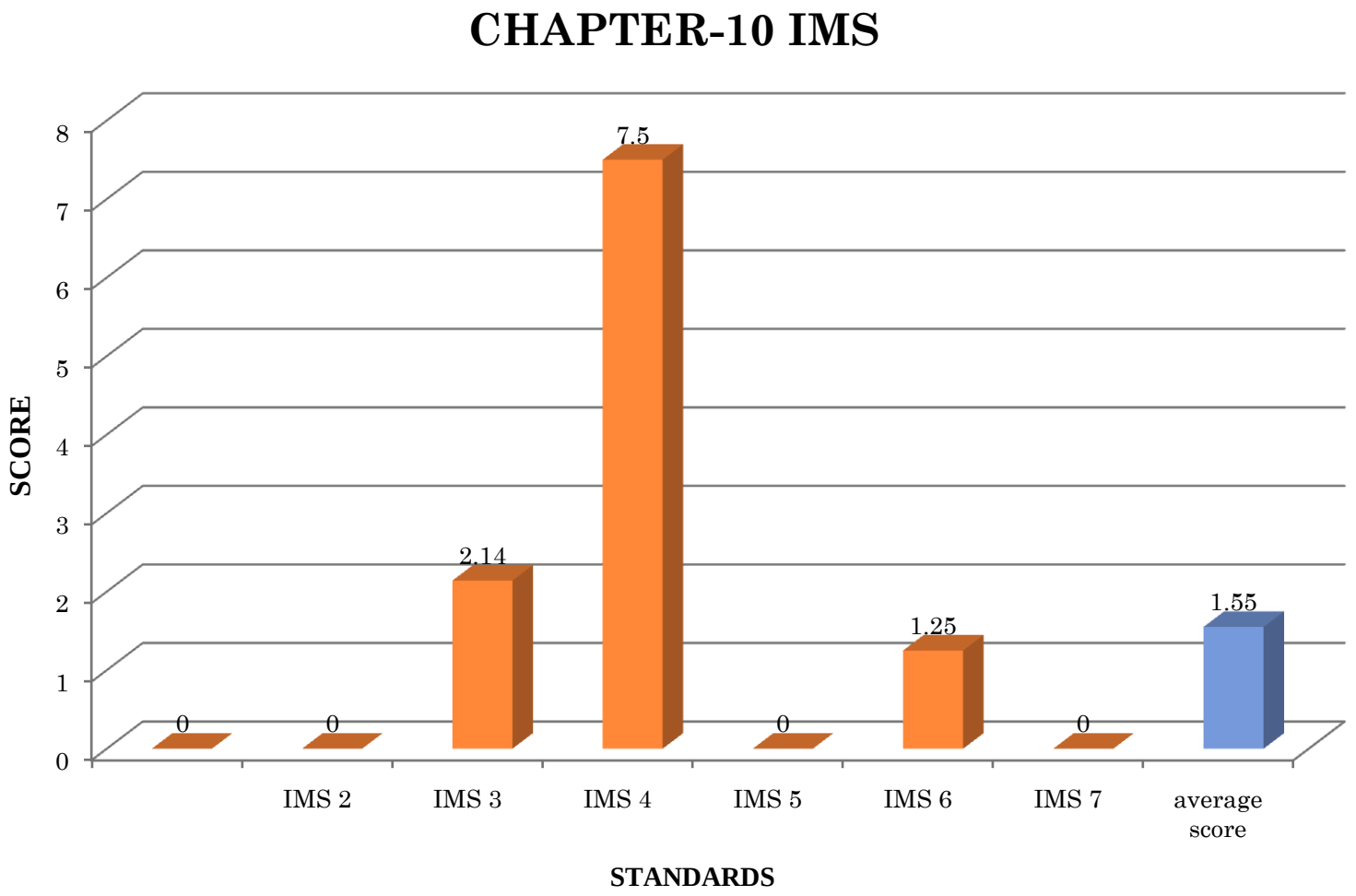
STANDARDS OF CHAPTER 8



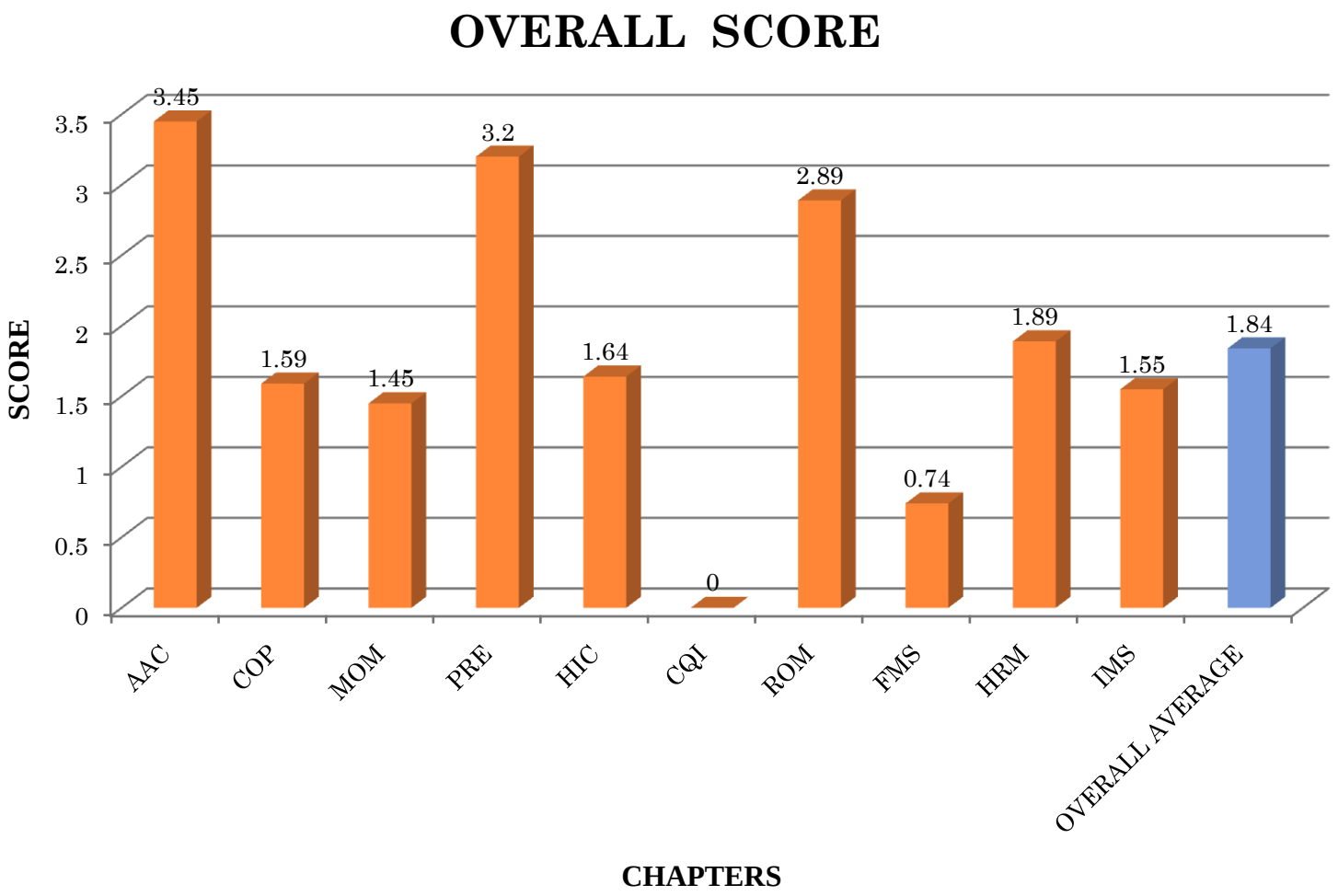
STANDARDS OF CHAPTER 9



STANDARDS OF CHAPTER 10



AVERAGE SCORE OF ALL CHAPTERS



ON COMPARING THE HOSPITAL PRESENT STATUS WITH CRITERIA OF NABH PRE ACCREDITATION ENTRY LEVEL WE FIND:

- There are many individual standards with more than two zero.
- There are many standards having average score less than 5.
- All individual chapters having average score less than 5.
- The overall average of all the standards does not meet the criteria as it is lesser than 5.
- With the above analysis it is clear that the hospital is not fulfilling the pre-accreditation entry level criteria.

CONCLUSION

There are different stages of accreditation which needs to be fulfilled by the organization.

As of now the hospital does not fulfill the criteria for entry level according to which no standard must have more than two zero and the average score of individual standard must not less than 5 and the average score for individual chapter must be more than 5.

We conducted gap analysis to analyze the present status of the hospital and concluded that the hospital is not at entry level as there are many standards having less than 5 score therefore these are the areas which require greatest attention.

Thus the hospital is presently not prepared for pre – assessment and requires great effort and focus on the weak points so as to cover the gaps and to be prepared for getting NABH accreditation


Thank You!