"ASSESSMENT OF COMPLIANCE ON IPHS STANDARDS FOR DISTRICT HOSPITAL SANGRUR, PUNJAB

SUBMITTED BY:

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PGDHM 17

PUNJAB HEALTH SYSTEMS CORPORATION

- The Punjab Health Systems Corporation was incorporated by the State Govt. in the year 1996 through enactment of Legislative Act, "The Punjab Health Systems Corporation Act, 1996" (Punjab Act No.6 of 1996)
- Main objective is implementation of a World Bank assisted Health Systems Development Project for revamping of existing secondary level health care services.
- Corporation has taken over 166 Institutions which includes District Hospitals, Sub-Divisional Hospitals and Community Health Centres.
- Under this project modernization and updating of 157 hospitals has envisaged through systems supports such as Computerization, HMIS, Disease Surveillance, Training of Personnel, Quality Assurance, Bio-waste Management, Strengthening of Physical Infrastructure (Buildings & Equipments) etc.

DISTRICT/CIVIL HOSPITAL SANGRUR (PUNJAB) – PLACE OF DISSERTATION

- District Hospital Sangrur caters to the people living in urban and rural people in district.
- It is referral hospital for Primary Health Centre & Sub- centres. It covers 33 PHC and 48 CHC.
- It covers the population of 1,655,169 and build in 8 acres area.
- The number of beds available in Hospital is 100.
- All departments required for District Hospital are available in this hospital.

KEY LEARNINGS

- Functioning of Government Hospital and management issues related to it.
- Checking of day to day work of Hospital
- Conducting various committee meetings
- Supervising various departments like Medical Record, Housekeeping, Nursing etc.
- Managing the work assigned with limited recourses

AIM OF THE STUDY

Research Question:

- Does Civil Hospital Sangrur provide the minimum assured services required to comply for the IPHS standards??

- The study aims at building the system leading to Quality Management Certification of District Hospital Sangrur

- Quality certification starts with minimum quality standards achievement. The standards referred to are those 'standards flowing from the IPHS guidelines

OBJECTIVE OF THE STUDY

- To assess the compliance to Indian Public Health Standards in a District Hospital.
- To observe the process flow of the departments with the findings as per IPHS guidelines. To describe the process flow of respective departments in the hospital with the identification of process Owners, Input(s), Output(s) and process flow of each process occurring at each section of hospital with relevant records.
- To identify the significant gaps observed on all the processes in each section and explanation of the gap statement based on IPHS and ISO 9001:2008 standards.
- To prepare actions to be taken to fulfil the gaps, if any.

REVIEW OF LITERATURE

- **Indian Public Health Standards (IPHS) Guidelines for District Hospitals (101 to 500 Bedded) Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India, Revised 2012.**

  The IPHS are set of uniform standards envisaged to improve the quality of health care delivery in the country. IPHS guideline focus on each and every area of the hospital showing the infrastructure requirements, Instruments and equipments required, drugs required in hospital, quality assurance and quality control processes and services, statuary compliances.

- **ISO 9001:2008 Quality Management System – Requirements** (Third Revision)

  The International Organization for Standardization known as ISO is an international standard -setting body composed of representatives from various national organizations.

  ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family of ISO 9000 that can be certified to.

RESEARCH METHODOLOGY

- **STUDY AREA** : Civil Hospital, Sangrur

  SAMPLE:
- Top management officials: Civil Surgeon, SMO, Matron, DMC.
- Patients: 10 patients from each departments (OPD, IPD, MCH, Pathology, Blood bank, OT, Radiology)
- Employees at all levels.
- **STUDY DESIGN**: Exploratory/ descriptive study
- **TOOLS:** IPHS Checklist, ISO guidelines, interview schedule, Observation notes
- **METHOD** :

- IPHS Checklist and guidelines used for total survey of the hospital in terms of Services provided, Manpower, Physical Infrastructure, Equipments, drugs and Lab Services.
- Observation and personal Interview was used to illustrate the various processes of hospital and to know the functioning of each department with reference to IPHS guidelines. Extensive analysis was done based on data collected. The findings have been listed under the process flow and gap analysis based on iphs guidelines.
- After process flow and analysis of gaps, actions to be taken with respect to the laid down requirements of the IPHS guidelines were recommended

FINDINGS

- OUT PATIENT DEPARTMENT GAP ANALYSIS
- IN PATIENT GAP ANALYSIS
- EMERGENCY DEPARTMENT GAP ANALYSIS
- LABORATORY GAP ANALYSIS
- OT GAP ANAYSIS

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
OP001	Basic facilities are not available in the OPD waiting area for public conveniences.	High	**IPHS Physical Infrastuctute/Departemental Lay Out/Clinical Services(I),a,b,c ,ISO 9001: 2008 6.3.(a), 7.2.1 (b)**
OP002	Information displays provided at the Waiting area / other public areas are inadequate	Medium	**IPHS Physical Infrastucture /Departemental Lay Out/Clinical Services(I),a, ISO 9001: 2008 7.2.3 (a)**
OP003	Patient privacy not maintained during the consultation	Medium	**IPHS Physical Infrastucture/Departemental Lay Out/Clinical Services (I). e, ISO 9001: 2008 6.3(a), 7.2.1(a)**

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
IP001	Hospital does not have disabled friendly infrastructure.	High	IPHS /Physical Infrastructure/Departmental Layout/Hospital Administrative and support (VII), ISO 9001:2008 6.3, 7.2.1
IP002	Ward are not well equipped for patient care	High	IPHS Physical Infrastructure/Departmental Layout/Clinical Services (V), ISO 9001:2008 6.3
IP003	Nursing stations are not located properly for patient monitoring	High	IPHS Physical infrastructure/Departmental Layout/ Clinical Services (V), ISO 9001:2008 6.3 (a)
IP004	Infection control not being practiced in the wards.	High	IPHS Services/Health Care Workers Saferty(5),Services/Patient Safety and Infection Control(4),ISO 9001:2008 7.2.1.(c)
IP005	Overcrowding of the patient care areas	Medium	IPHS Physical infrastructure/Departmental Layout/ Clinical Services (V), ISO 9001:2008 7.2.1.(b)
IP006	Internal transfer of patient is not effective.	Medium	IPHS Physical infrastructure/Departmental Layout/ Clinical Services (VI), ISO 9001:2008 7.2.1(b)
IP007	Facilities for collection and storage of linen are inadequate	High	IPHS Physical Infrastructure/Departmental Layout/Hospital Services(IV), ISO 9001:2008 6.3, 7.2.1

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
EMER001	Non availability of Ambulance control room for effective patient transport.	Medium	IPHS Physical Infrastructure/Departmental Layout/Clinical Services (IX), ISO 9001: 2008 6.3 (c)
EMER002	Emergency department is not fully Equipped.	High	IPHS Physical Infrastructure/Departmental Layout/Clinical Services (IX), ISO 9001: 2008 6.3 (b)
EMER003	Department is not designed as per requirements of the department	High	IPHS Physical Infrastructure/Departmental Layout/Clinical Services (IX), ISO 9001: 2008 6.3 (a), 7.2.1

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
LAB001	Space in the laboratory is not sufficient as per the requirements of district hospital	**High**	IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(III), ISO 9001:2008 6.3 (a)
LAB002	Equipments are not available as the work load	**High**	IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(III), ISO 9001:2008 6.3 (b)
LAB003	No designated sample collection area in the lab.	**Medium**	IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(III), ISO 9001:2008 6.3 (a)
LAB004	Standard safety precautions are not been followed.	**Medium**	IPHS Services/Patient Safety and Infection Control(5), ISO 9001:2008 6.3.(b), 7.2.1 (b)
LAB005	Maintenance of the lab equipments not carried out.	**High**	IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services III), ISO 9001:2008 6.3(b)

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
OT001	Patient care in OT is negligible	High	**IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(IX), ISO 9001:2008 7.5.1**
OTOO2	Insufficient humidity and temperature controlling methods as a result infection exposure to patients.	High	**IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(IX), ISO 9001:2008 7.5.1**
OT003	Low quality equipments	High	**IPHS EQUIPMENT NORMS(IX), ISO 9001:2008 7.6**

MATERNAL AND CHILD HEALTH

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
MCH 1	lack of information regarding child care to pregnant ladies (pre and post delivery)	High	**IPHS Physical Infrastructure/Departmental Lay Out/Intermediate Care(V),ISO 9001:2008 8.2.3**
MCH2	unhealthy care may cause serious infection	High	**IPHS Physical Infrastructure/Departmental Lay Out/Delivery suite unit(XII), ISO 9001:2008 6.2.2 & 7.5.1**

BLOOD BANK

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
BB1	The requisition of blood for the surgical cases is not sent in advance.	High	**IPHS Physical Infrastructure/Departmental Layout/Clinical Services (IV),ISO 9001:2008 7.3.2**
BB2	no calibration records of the instruments are present.	High	**IPHS Physical Infrastructure/Departmental Layout/Equipment Norms, ISO 9001:2008 7.3.6**
BB3	no important records are maintained in the blood bank.	High	**IPHS Healthcare Workers safety (Annexure IV)**

Rust in OT Sterilization Room

QUALITY OF INSTRUMENTS IN OT

MEDICAL RECORD DEPARTMENT

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
MRD01	lack of defined system for storage, protection, easy retrieval, retention and disposal of medical records.	Medium	**IPHS /Physical Infrastructure/Departmental Layout/Hospital Administrative and support (XIV), ISO 9001:2008 4.2.4**
MRD02	no guidelines for disposal of medical records	High	**IPHS /Physical Infrastructure/Departmental Layout/Hospital Administrative and support (XIV), ISO 9001:2008 4.2.4**

MRD ROOM

PHARMACY STORE

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
PHR01	lack of well defined inventory management system in pharmacy store	Medium	**IPHS Physical Infrastructure/Departmental Lay Out/Clinical Services(VI), ISO 9001:2008 6.3**
PHR02	expiry records for the drugs in stores are not regularly updated	Medium	**IPHS Hospital Administrative and Support Services(XIV), ISO 9001:2008 8.2.3**

RADIOLOGY DEPARTMENT

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
RAD01	no facility of X-ray after 2 pm	High	**IPHS Physical Infrastructure/Departmental Lay Out/Safety Measures, ISO 9001:2008 7.5.2**
RAD02	Equipment calibration and AMC is not done	High	**IPHS Physical Infrastructure/Departmental Lay Out/Safety Measures, ISO 9001:2008 7.5.2**

LAUNDRY

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
LR01	Dirty linen	Medium	**IPHS /Physical Infrastructure/Departmental Layout/Hospital Administrative and support services (IV), ISO 9001:2008 6.3, 7.5.1**
LR02	lack of maintenance and safety measures	Medium	**IPHS /Physical Infrastructure/Departmental Layout/Hospital Administrative and support services (IV), ISO 9001:2008 6.3, 7.5.1**

HOSPITAL WASTE MANAGEMENT

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
BMW01	no proper segregation and disposal of wastes	High	**IPHS ANNEXURE (II),** **ISO 9001:2008 6.3, 7.2.1**
BMW02	Transportation of waste is error prone	Medium	**IPHS ANNEXURE (II), ISO 9001:2008 6.3, 7.2.1**

HOSPITAL TRANSPORT

GAP ID NO:	GAP STATEMENT	GAP SEVERITY	GAP REFERENCE
AMB01	non-availability of duty doctor or staff nurse in the ambulance	High	**IPHS /Physical Infrastructure/Departmental Layout/Hospital Administrative and support (XVI), ISO 9001:2008 7.3.2**
AMB02	no trainings conducted for ambulance staff	High	**IPHS Capacity Building , ISO 9001:2008 7.3.2**
AMB03	ambulances are ill equipped.	High	**IPHS Capacity Building , ISO 9001:2008 7.3.2**

CONCLUSION & RECCOMENDATIONS

- The study revealed the assessment of compliance in various departments of the hospital as per IPHS norms and found out the gaps which need to be full filled for the quality improvement of the district hospital, Sangrur. By achieving the quality care services District Hospital will be able get ISO 9001:2008 certification and also achieve IPHS Standards.

- Gaps of all the departments are mainly process gaps, some of those gaps are infrastructure, equipment and manpower gaps. Study also revealed that what specific and general action to be taken for full filling those gaps. What kind of trainings is required and will be given to the staff including nurses, housekeepers, ward boys and medical officers. Special consideration on gaps of the department is given and action plan is prepared and need to be monitored by internal experts who include Matron, Senior Medical Officer and Civil surgeon.

ACTION PLAN SUGGESTED FOR OPD:

- Drinking water facility/water cooler to be installed near OPD waiting area.
- Ramp with side rails, Disable friendly toilets to be provided in the Hospital.
- Sitting arrangements to be made for waiting patients. No of chairs to be increased.
- Trash bins to be installed in proper places in adequate quantity. Also near water cooler and in toilets.
- Arrangements of Wheel Chairs, stretcher and trolleys.
- Arrangement of BP apparatus in the OPD chamber.
- Arrangement of weighing machine in the OPD.
- Patient privacy should be maintained in the OPD chambers.
- All patient care equipments and instruments to be provided in all patient care areas as per IPHS guidelines
- Adequate number of Tube lights to be provided.
- Uniform signage system to be developed and displayed throughout the hospital
- Rights of the patients / Patients Charter to be displayed in area where it is fully visible and readable by public.
- Posters imparting health education and awareness to be posted in prominent places in vicinity.
- Bilingual format for information dispersal to be implemented.
- Suggestion box should be available in the OPD and IPD area.
- Curtains to be provided for doors of consultation rooms and in all patient care areas.
- Security personnel have to be employed to help in control crowd.

Action Plan suggested for IPD

- Lifts, Handrails in various patient care areas, bathrooms has to be installed to avoid patient fall.
- Disabled friendly toilet has to be made available.
- The wards to be rearranged so as to provide adequate space for smooth movement.
- Crash Cart in IPD.(emergency medicine tray)
- Proper locker for keeping the medicines in the IPD.
- Water Supply to be made available in the IPD.
- Phototherapy, baby warmer has to be available in the post delivery ward.
- Visiting time to be fixed for patient's attendants.
- The ward need to be provided with adequate equipments, Instruments, patient furniture for proper patient care activities such as IV Stands, Crash carts, Lockers.
- Equipment such as ECG machine, Suction machine has to be made available in the ward.
- Wheel chair and trolleys to be provided for each patient care area
- Repair work of doors and windows has to be done at the earliest.
- Bed railings to be made available in the wards.
- Color coded bins for BMW segregation has to be provided in the wards.
- Nursing station has to be located centrally for the direct observation and monitoring.
- Nursing station has to be equipped with essential patient care equipments such as Crash carts, Dressing trolleys, sets, BP apparatus, Stethoscope, Suction apparatus, oxygen cylinders, Medicines etc.

- Basic requirements such as storage place for inventory, linen, and drugs have to be provided.
- Washing areas to be earmarked for washing of badly soiled linen.
- Hand washing facility to be provided in all patient care areas.
- Documents related to patient care have to be complete.
- The department to be integrated with Registration and Admission & Discharge units.
- Training of staff in BMW handling will be done.
- Proper channel of waste disposal to be ensured.
- Periodical pest control measures to be taken in the ward or in the hospital.
- Timing for visitors to see the patients has to be decided and strictly imposed.
- Appointment of Security personnel to be taken in all the areas to control the traffic.
- Hospital policy to be devised and implemented regarding the no. of attendants who can stay with patients.
- Hospital policy to be devised and implemented regarding transfer of patients within the hospital.
- Adequate no. of wheel chair and trolleys to be maintained.
- Soiled linen collection trolley has to be made available.
- Storage cabinets for clean linen have to be made available.
- Sluicing room has to be there in the wards.

ACTION PLAN SUGGESTED FOR EMERGENCY:

- One person has to be made coordinator for ambulance services.
- Phone no. for Ambulance to be advertised.
- Availability of driver has to be insured.
- Staff to be appointed and positioned according to work pattern.
- Observation beds to be available in the Emergency department.
- Crash Cart with all essential drugs have to be available.(emergency medicine tray)
- Patient monitoring equipment to be available in the Emergency.
- Disaster cupboard to be made available in the department.
- Arrangement for resuscitation room has to be done.
- Ramp in Emergency department to be made available.
- The department to be organized as per the workflow.
- Triage Area needs to be earmarked just next to the entrance to the ER
- Equipments in Emergency should be as per IPHS guidelines.
- Stretcher, wheel chair bay has to be made available.

Action Plan suggested for Laboratory:

- Separate lab for Haematology needs to be built.
- Demarcation of washing and sampling area to be done.
- Availability of personal protective devices such as masks, gloves and apron for all workers.
- Availability of fire extinguisher in the lab.
- Availability of equipments and instruments as per IPHS Guidelines.
- Manual for laboratory showing all the standard procedures.
- Display of standard operating procedures in laboratory.
- Availability of needle cutter and needle destroyer.
- External quality assurance tests to be done.
- Proper infection control measures to be practiced.
- Practice of proper segregation of waste material as per biomedical waste standards.
- Calibration of instruments and record for calibration to be maintained.
- Record maintenance of preventive maintenance of each equipment.

Action Plan suggested for OT:

- OT needs to follow Zoning System.
- Quality of instrument should be standardised.
- According to IPHS guidelines Central AC is a must for OT.
- Infection control protocols must be followed.
- Sterilization register should be maintained for processes like fumigation.

Action Plan suggested for Maternal and Child Health

- Separate nurses for labour room can be made available. Proper training for the filing of partogram needs to be provided.
- Trainings for infection control and BMW should be given to ward boys and staff.
- Signage in local language should be displayed for the purpose of disposal of waste in toilets.
- Baby identification band need to be availed in the labour room and one relative is required to be available at the time of delivery.
- Use of digital baby weighing scale instead of manual weighing scale
- Hygiene training to the staff and use of mask, gloves and hand hygiene practices.

Action Plan suggested for Blood Bank:

- Separate autoclave should be provided to blood bank and after autoclaving the bags can directly be given to the contract company as general waste.
- Needle stick injury record register should be maintained.
- Calibration of instruments
- License of blood bank is under process and the blood bank is running without license

Action Plan suggested for MRD

- Medical record technician should be assigned the duty of maintenance of records.
- Proper training and guidelines should be followed for record maintenance.
- MLC should be kept separately in lock and key system.

Action Plan suggested for Laundry

- Training to the staff for proper handling of soiled linen.
- Training to dhobi for instructions and amount of detergent solution to be used.
- Proper maintenance of laundry machine.
- Systematic approach of receiving and issuing of linen on daily basis.

Action Plan suggested for Radiology

- Proposal for light weighed lead apron.
- Training to the staff regarding use of PPE and safety measures.
- Proper signage system, precautions for pregnant women should be placed in front of X-ray department.

Action Plan suggested for Hospital Waste Management

- The hospital needs to encourage the process of hand washing. Waste needs to be collected in the colour bags with biohazard symbol displayed on it.
- It is also suggested that the contract with the outsourced external waste disposal organisation needs to specify the quality needs of the hospital.
- Training about PPE to the staff.
- Trolleys need to be availed to carry dirty linen and the dirty linen handling staff needs to be motivated to wear gloves on compulsory bases.
- Hospital infection rate surveillance needs to be carried out regularly by appointing Hospital Infection Control Committee.

ACTION PLAN SUGGESTED FOR HOSPITAL TRANSPORT

- All the required equipments in the ambulance need to be installed.
- Provision of duty doctor or staff nurse to accompany the critical patients.
- Training to staff periodically.
- Proper maintenance of ambulance with record book.

REFERENCES

1. Indian Public Health Standards (IPHS)for 101 to 200 bedded District Hospitals. Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India, January 2007.
2. Available From:http://www.pbnrhm.org/downloads/101-200_beded_District_Hospitals.pdf
3. Indian Public Health Standards (IPHS) Guidelines for District Hospitals (101 to 500 Bedded) Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India, Revised 2012.
4. Available from:http://health.bih.nic.in/Rules/District-Hospital-2012-Revised.pdf
5. ISO 9001:2008 Quality Management System – Requirements(Third Revision)
6. Available From:http://intra.itiltd-india.com/quality/ISOStandards/ISO9001-2008-STD.pdf
7. Assessor's Guidebook for Quality Assurance in District Hospitals 2013(Volume II). Ministry Of Health and Family Welfare, Government of India.
8. AvailableFrom:http://www.rrcnes.gov.in/quality%20Assurance/Volume%202_National%20Quality%20Assurance%20Standard%20Guidelines%20for%20Assessment%20(23-11-2013)_OP.pdf
9. "ISO 9001 certifications top one million mark, food safety and information security continue meteoric increase" (Press release). International Organization for Standardization. October 25, 2010. Retrieved March 24, 2014.
10. Clifford, Stephanie, "So many standards to follow, so little payoff", (May 1, 2005).
11. Rationalisation of Service Norms for Secondary Care Hospitals, Health & Family Welfare Department, Govt. of Tamil Nadu. (Unpublished)
12. District Health Facilities, Guidelines for Development and Operations; WHO; 1998.


Thank
you