Summer Training

Report By

Ms. Greenal Lodha

MBA (Hospital and Health Management)

2019-21

IIHMR UNIVERSITY

Acknowledgements

Nothing truly can be cultivated alone. It's the course, direction, contribution, backing and supplications of in excess of a not many that outcomes into acknowledgment. IIHMR University, Jaipur and its instruction merits the premier gratefulness for giving me the chances to comprehend my individual capacities.

I sincerely thank **Dr. Yatin Talwar,** CEO at GBH American Hospital, Udaipur for giving me the consent to do my undertaking in his regarded hospital. I consider it is a matter of pleasure and privilege to work under his guidance .I am grateful for his encouragement, support, guidance and help which has resulted in completion of my project. I am thankful to **Dr. Neha Dak**, Quality Head, GBH American Hospital, for her guidance.
I also owe a great debt of gratitude to the administration of GBH American Hospital and Medical College.

I am additionally appreciative to my guide, Dr. Susmit Jain, Associate Professor, IIHMR University, Jaipur for his steady assistance and proposals during the time of my summer training.

Greenal Lodha

Part-1

(Research Work Topic: Comparison of NABH and AB-PMJAY quality standards for accreditation in a Tertiary Care Medical hospital in North India).

Table of contents

List of Tables

List of Abbreviation

AAC	Access, Assessment and Continuity of care
AB-PMJAY	Ayushman Bharat Pradhan Mantri Jan Arogya Yojana
BLS	Basic Life Support
BMW	Bio Medical Waste
CAPA	Corrective and Preventive Action
COP	Care of Patient
CQI	Continuous Quality Improvement
CS	Clinical Services
DDD	Defined Daily Dose
DRP	Drug Related Problems
FMS	Facility Management and Safety
HAI	Hospital Acquired Infection
HCO	Heath Care Organisations
HDU	High Dependency Unit
HIC	Hospital Infection and Control
HO	Health Outcomes
HRM	Human Resource Management
ICU	Intensive Care Unit
IMS	Information Management system
IPD	In-Patient Department
IT	Information Technology
JCI	Joint Commission International
KI	Key input
MOM	Management of Management
NABH	National Accreditation Board for Hospitals and Healthcare Providers
OPD	Out-Patient Department
OT	Operation Theatre
PC	Patient care
PRE	Patient Right and Education
QCI	Quality Council of India
QI	Quality Improvement
ROM	Responsibility of Management
SS	Support Services
VAP	Ventilator Associated Pneumonia

Chapter -1 Observational Learning

1.1- Introduction- Hospital Profile

GBH American Hospital was opened in 2006. It was the way to go and goal of Dr. Kirti K. Jain to give the quality medicinal services to India which set the diagram to fabricate Udaipur's first multispecialty private segment clinic. In this way, under the motivating authority of Dr. Jain, GBH AH has been perceived as a top medical clinic in Udaipur, conveying remarkable and exceptional patient consideration. GBH American have a group of master doctors, attendants, and staff cooperating to furnish with cutting edge medication in a customized and caring condition. They accept that persistent nature of care and execution improvement as the establishment for saving and upgrading heath care conveyance. For the solace of patients, the medical clinic highlights private patient rooms, dozing zone for friends and family and condition of-workmanship medical procedure suites and the biggest and most present day crisis and injury focus in Udaipur.

The MISSION is to give the most excellent tertiary (super-claim to fame) clinical consideration, exceptional administrations and best qualities to all its neighborhood and worldwide customers; through committed, profoundly talented and sympathetic specialists and staff; utilizing State of the Art innovation. They are additionally dedicated to the development, improvement and government assistance of the individuals, and the formation of significant worth for the partners. The VISION is To Serve, To Heal, To Grow. ACCREDITATION-It is a NABH certify emergency clinic.

Quality Care at GBH-

● GBH offers high quality care and safety to all its patients.

● The patients get administrations by accreditation clinical staff, and the benefits of the patients are respected and secured.

● It is committed to persistent improvement and show pledge to quality consideration.

●It gives trustworthy and ensured information on workplaces, structure and level of care which is of most extreme essential to the patients**.**

1.2- Mode of data collection

Qualitative methods were adopted for the study

1.3- General findings

Various Departments in Hospital-

●Neurology and Neuro surgery
●Cardiology and Cardio Surgery
●Cancer Treatment
●Gastrology
●Radiology Department
●ICU
●General medicine and Surgery
● Urology
●Nephrology
●Gynaecology
●Physiotherapy
●OT, and many more.

Quality division guarantees to give quality consideration to tolerant. The activity of significant worth office at GBH American Hospital is to enable the therapeutic administrations to gather as they steadily try to improve their methods of social protection movement .The quality gathering screens and surveys designs inside the crisis facilities and focus on improving the quality thought provided for patients.

Main Report

"Comparison of NABH and AB-PMJAY quality standards for accreditation in a Tertiary Care Medical hospital in North India"

Chapter- 2 Introduction

2.1- Background-

India propelled its own accreditation framework in 2006, which is known as National Accreditation Board for Hospitals and Healthcare Providers (NABH) which is a constituent leading body of Quality chamber of India.The quality standards of NABH are categorized into Patient centered standards and Organisation centered standards. Indian Healthcare system is a vast ecosystem having mushrooms of Healthcare organizations (HCO), the organizations also have been stratified under various categories like govt., private, public private partnership, trust and so on. Almost 90 to 95 percentage of the hospitals in tier 1 and approximately 70percent of hospitals in tier 2 and tier 3 cities have been accredited with NABH standards set up by Quality council of India (QCI).

It was also felt by that there is no set defined methodology and mechanism to compare the service standards and quality parameters being implemented for patient care services in various healthcare organizations (HCO) owing to lack of comparison standards. Though in some instances there have been reports of some accredited hospitals under a single chain / group of hospitals have been comparing parameters of patient satisfaction, grievance redressal, and quality of services provided amongst various centers.

. Quality Improvement is the organised approach to design and apply constant development in performance. QI increase patient satisfaction, staff satisfaction as well as the quality of care provided by an organisation. QI guarantees to improve the nature of care gave in medical clinics yet they face battle in receiving them.

In 2018, Prime Minister Narendra Modi launched Ayushman Bharat scheme which classifies hospitals into three standards. BRONZE, SILVER and GOLD. The highest standard is GOLD standard and the organization need to improve the nature of care persistently to achieve this certification.

AB-PMJAY is divided in 5 chapters-

1) Key Inputs
2) Clinical Services
3) Support Services
4) Patient Care

5)Health Outcomes

NABH is categorized in Patient centred and Organization centred under which there are 5 standards in each.

1) Access, Assessment and Continuity of Care (AAC)
2) Care of Patients (COP)
3) Management of Medication (MOM)
4) Patient Right and Education (PRE)
5) Hospital Infection Control (HIC)
6) Continuous Quality Improvement(CQI)
7) Responsibility of Management (ROM)
8) Facility Management and Safety(FMS)
9) Human Resource Management (HRM)
10) Information Management System (IMS)

Gold standards of AB-PMJAY were compared with 4th edition of NABH. As both AB-PMJAY and NABH are implemented in hospitals that's why we need to know that which standards are common in both and which are different.

2.2- Problem Statement-

Hospital services follow the bench marks and standards of NABH. AB-PMJAY have its own standards, which helps in increasing quality of care and patient satisfaction for those hospitals that are accredited with AB-PMJAY and who may not be NABH accredited. As defined previously, the lack of comparison of standards owing to non-compliance with the accreditation bodies has lead disparity in service standards across various industries. The non-adherence to these standards may be due to multiple reasons. Hence the problem statement has been directed towards eliciting the challenges a healthcare organization encounters while getting these standards (NABH and AB-PMJAY) implemented and compared.

2.3- Justification of Study

The study was devised for eliciting and defining the challenges faced by a HCO for getting accreditation for NABH and AB-PMJAY. Quality assurance of the service delivery, which is often missed can be assured because by strict adherence to the standards. Once accreditation is completed, the adherence to the standards can ensure benchmarking and a comparative of service quality delivery across various healthcare organizations can be done. It is important to have quality benchmarks as it helps in quality mapping through quality accreditation standards.GBH American Medical College and the Corporate hospital is a combine of 1040 bedded infrastructure in Udaipur town of the State Rajasthan. The corporate hospital is NABH accredited since 2010 and is stated to be the oldest corporate hospital in City of Udaipur The Medical College had come up in 2012, with a dedicated cancer hospital. The Medical College is a premier tertiary care teaching hospital in the city and caters to patients from adjoin seven districts. The medical college is at present aiming for NABH accreditation and AB-PMJAY accreditation. Hence the study was performed under the guidance of administration of the hospital and medical college.

2.4- AIMS and OBJECTIVES of the study-

- To access challenges faced by any hospital/administration for ensuring compliance to the standards defined for accreditation
- Similarities and differences between the NABH and AB-PMJAY Standards
- To identify the challenges which are faced by administration and quality heads during the implementation of NABH and AB-PMJAY standards in a newly setup corporate hospital (green field project).
- To identify the comparative analysis of NABH and AB-PMJAY in green field project.

Chapter- 3 Review of Literature

1)Samuel N. J. David, Sonia Valas (2017), discussed the benefits of accreditation for all the stakeholders. As the accreditation provides great patient consideration and patient wellbeing, the main beneficiaries are the patients. There is regular evaluation of the patient satisfaction for the quality improvement. Not only the patients are aware of their rights, but it is also made sure that their privileges are regarded and secured. It also shows the commitment of the hospital to patients' safety and quality care giving it an "competitive edge" over other hospitals. For the process of accreditation, the hospital must nominate a coordinator to arrange all the exercises identified with the accreditation and the organization is made familiar with all the standards and their implementation. "In the current scenario, the NABH standards is the highest benchmark standard for hospital quality in India".

2) **Nazish Rahat (2017),** classified the challenges faced by the hospitals during accreditation into The Program Challenges and the Organizational Challenges. The program challenges are Support of regulatory initiatives, Encouraging drivers and Professional requirements. Lack of government initiatives, financial costs , voluntary nature of accreditation are the common program challenges. There is a need to design the standards according to the nation's requirements and using the relying surveying practices and assessment techniques. The organization challenges consists of the knowledge and commitment of the hospital managers, motivation of the staff, lack of financial resources, environment friendly practices, and the need of quality improvement in terms of organizational objectives, documentation, hospital infection control, IT practices and the communication within the organization about the areas needing improvement.

3) **Kirsten Brubakk, Gunn E. Vist , Geir Bukholm , Paul Barach and Ole Tjomsland (2015)**, anticipated accreditation as a "prototypical example of a complex intervention." They reflect the challenges related to the accreditation procedure as far as the execution and the management, the financial constraints of the healthcare organizations, and the organizational outcomes

4)Mandeep, Naveen Chitkara, Sandeep Goel (2014), conducted a questionnaire based study at NASA spine centre, Jalandhar on 10 doctors and 40 nurses the accreditation procedure as far as the NABH guidelines. The study showed the positive effect after 6 months of accreditation on patient care, reducing medical error and improving patient satisfaction. After training on accreditation standards, the knowledge level of the medical staff about the NABH accreditation was significantly improved, leading to better working conditions , and greater staff satisfaction.

5) Gloria KB Ng Gilberto KK Leung Janice M Johnston Benjamin J Cowling (2013), conducted a SWOT Analysis on the factors affecting the accreditation of hospitals

in Hong Kong. “Increased staff engagement and communication, multidisciplinary team building, positive change in organisational culture, enhanced leadership and staff training, increased integration and utilisation of information, and increased resources dedicated to CQI were identified as internal positive factors (i.e. strengths) that may facilitate the successful implementation of accreditation programmes. Internal negative factors (i.e. weaknesses) included barriers such as organisational resistance to change, increased staff workload, lack of awareness on CQI, insufficient staff training and support for CQI, lack of applicable accreditation standards for local use, and lack of performance outcome measures. This review also identified external positive factors (i.e. opportunities), including identification of areas to improve, enhanced patient safety, additional funding, public recognition, market advantage, and development of suitable accreditation standards for local use.. Since accreditation programmes involve different stakeholders with different interests, a factor can be strength or a weakness, an opportunity, or a threat in a SWOT analysis, depending on the point of views or expectations.”

Chapter-4 Methodology

The study was conducted in GBH American Hospital, Udaipur which is affiliated to teaching institute to understand possibility and preparation of quality department and Hospital team for NABH and AB-PMJAY.

4.1- Study Design

Cross sectional descriptive study which various parameters of standards were analysed and compared.

4.2- Study Setting

The hospital at present has approximately 1040 functional and operational beds. The daily average footfall of patients is around 3500. It was built on about 80 acres of land.

4.3- Sample Size-All standards of NABH and AB-PMJAY were compared.

4.4- Sample Selection Procedure- All standards were compared

4.5-Data Collection Tools and Technique

Qualitative methods were adopted for the study.

A study was conducted in department to understand the similarities and differences in quality benchmarks of various standards.
All parameters of NABH Standards that are ten sections fusing 102 guidelines and 636 target components and AB-PMJAY which are 53 quality standards and the means of verification are 182. These 53 standards are categorizes in 5 chapters were analysed and compared.
Data collection tools and techniques-Qualitative method were adopted.

4.6- Inclusion and Exclusion Criteria For Respondents-

Inclusion criteria-All parameters were taken into considerations

Exclusion criteria-Nil

4.7-Duration of the Study- The investigation time frame was from 1st April to 31st May 2020.

4.8-Scope of the Study

The extent of the investigation to contemplate similitude and difficulties in actualizing measures in an emergency clinic and a clinical school by

- Establishing work guidelines in the Quality division and different offices
- Identify wellsprings of blunder and troubles in executing the measures.
- Setting up better expectations of administration quality in the emergency clinic.

●Improving the current procedures, apparatuses or workplace of the divisions there guaranteeing exacting adherence to the principles

Chapter-5 RESULT

Table-1- Significant Challenges Faced in Implementation of NABH in a Hospital and medical college

S.no	**Significant Challenges Faced in Implementation of NABH in a Hospital and medical college are**
1	The documentation required in NABH is large
2	Skilled staff, and repeated need of on job training is needed in implementation of NABH
3	For attaining NABH certification NABH certified trainer is required (NABH co-ordinator).
4	The quality standards of NABH are descriptive and elaborative, where attention is paid to even small details

Table -2- Major Challenges Faced In Implementing AB-PMJAY

S.no	**Major Challenges Faced In Implementing AB-PMJAY**
1	It broadly covers all the standards of NABH
2	To achieve gold standard certification hospitals have to make time to time changes and improvement in their structural, procedural, and clinical outcomes

SIMILARITIES-

- AB-PMJAY and NABH are constituent board of Quality Council of India (QCI).

-AB-PMJAY and NABH both have a common target which is improving patient's safety and Quality of Care.

DIFFERENCES-

-Documentation is more in NABH and less in AB-PMJAY.

-NABH requires skilled staff, AB-PMJAY doesn't.

-NABH is descriptive and elaborative, AB-PMJAY broadly looks to achieve universal coverage of quality parameters..

-AB-PMJAY can be achieved with minimum resources, However NABH cannot, be achieved with minimum resources..

-Hospital requires a Certified NABH co-ordinator if they want to achieve NABH certification, No such person required in achieving AB-PMJAY.

COMPARATIVE ANALYSIS OF NABH AND AB-PMJAY

Table 3- Comparative Analysis of Chapter 1,Key inputs of AB-PMJAY with NABH.

Chapters of AB-PMJAY	Ayushman Bharat Standards Certification	Reference NABH	Comparative Analysis
Chapter-1 Key Inputs			
KI 1	Physical facility of the building and hospital environment shall be developed and maintained for safety of patient, visitors, and staff	FMS 1,FMS 2	**FMS 1-** The organisation has a framework set up to give a sheltered and secure condition**.** **FMS 2-** The organisation's environment and facilities operate in a planned manner to ensure safety of patients, their families, staff and visitors and promote environment friendly measures.
KI 2	Proper space for ambulance and movement of patient.	COP 3 A	**COP 3 A**-There is adequate access and space for the ambulance(s).
KI 3	There should be no physical barriers for patients and the environment should be friendly for patients with disabilities.	FMS 1 B	**FMS 1 B**-Patient-safety devices & infrastructure are installed across the organisation and inspected periodically.
KI 4	The indoor and outdoor areas of the facilities should be well-lit		Patient safety audits are conducted
KI 5	Basic amenities should be provided for all patients, hospital staff and visitor.	FMS 2	**FMS 2-** The organisation's environment and facilities operate in a planned manner to ensure safety of patients, their families, staff and visitors and promote environment friendly measures
KI 6	The hospital should ought to guarantee that all clinical staff is sufficiently accredited according to the legal standards	HRM 9, HRM 10	**HRM 9**-Process for Medical Professional permitted to provide patient care without supervision **HRM 10**-Process for credentialing and privileging Nursing Professionals, permitted to provide patient care without supervision
KI 7	The facility has functional equipment & instruments as per the requirement of organization.	FMS 4 A	**FMS 4 A**- The association plans for gear as per its administrations and key arrangement.
KI 8	Fire detection and fire fighting	FMS 6	**FMS 6-** The association has plans

	equipment installed as per fire safety norms along with staff training.		for Non-Fire crises with the offices
KI 9	Staff involved in direct patient care shall be trained in CARDIO PULMONARY RESUSCITATION (CPR)and BASIC LIFE SUPPORT(BLS) along with the display of the same in all critical areas.	COP 5	**COP 5-** Documented strategies and systems manage the consideration of patients requiring cardio-pneumonic revival
KI 10	Yearly preparing arrangement ought to be set up for all staff covering all preparation needs.	HRM 3, HRM 4	**HRM 3-** There is an on-going programme for professional training and development of the staff. **HRM 4-** Staff are adequately trained on various safety-related aspects.

The 1stQuality standard of AB-PMJAY (KI1) says that the physical office of building and the clinic will be created and kept up for the wellbeing of patient, guest, staff and was contrasted and FMS1, FMS2 of NABH which says that The association has a framework set up to give a sheltered and secure condition and it works in an arranged way to guarantee security to quiet, their families, staff and guests and advances condition benevolent measures.

KI 2 expresses that emergency clinic ought to have satisfactory space for Ambulance and patient development which is contrasted with COP3A of NABH which says that the association will outline a legitimate space for the rescue vehicle. This will be separated remembering simple availability for accepting patients and to empower the ambulances to exit rapidly.

KI 3 expresses that Access to the emergency clinic ought to be given with no physical boundary and benevolent to individuals with incapacities and conversely FMS1B says Patient-security gadgets and framework introduced over the association and assessed occasionally. For instance, get bars, bed rails, seat straps, wheel seats, cautioning signs and so on.

KI 4 express that the indoor and open air regions of the offices ought to be sufficiently bright , interestingly Patient wellbeing Audits are directed.

KI 5 expresses that Basic conveniences ought to be accommodated all patients, medical clinic staff and guest in compare FMS2 of NABH express that the association's condition and offices works in an arranged way to guarantee wellbeing of patients, their families, and staff.

KI 6 expresses that, the clinic ought to guarantee that all clinical staff is sufficiently accreditation according to the legal standards was gather with HRM9, HRM10 of NABH which states - Process for Medical Professional allowed to give quiet mind without management… ., Process for credentialing and privileging Nursing Professionals, allowed to give understanding thought without oversight.

KI 7 expresses that, the office has practical hardware and instruments according to extent of administrations. furthermore, it was contrasted and FMS4A of NABH which expresses

This will likewise mull over future prerequisites. The hardware will be suitable to its degree and administrations. A decent reference for least hardware prerequisite could be the IPHG rules.

KI 8 is Fire identification and putting out fires gear introduced according to fire security standards alongside staff preparing, and interestingly FMS of NABH says the association has plans for fire and non-fire crises inside the offices.

KI 9 states Staff associated with direct patient consideration will be prepared in CPR and BLS alongside the showcase of the equivalent in every single basic region, and on the compare COP5 of NABH says Documented strategies and systems manage the consideration of patients requiring cardio-pneumonic revival.

KI 10 expresses that Annual preparing plan ought to be set up for all staff covering all preparation needs and interestingly HRM3 and HRM4 of NABH says There is an on-going project for proficient preparing and advancement of the staff and ought to satisfactorily prepared on different wellbeing related angles.

Table 4- Comparative Analysis of Chapter 2, Clinical Services of AB-PMJAY with NABH.

Chapter-2 Clinical Services			
CS 1	Patients privacy should be maintained in Out Patient Department (OPD) and In-Patient Department (IPD)	PRE 2 B	**PRE 2 B**-During all phases of patient consideration, be it in assessment or doing a methodology, emergency clinic and staff will guarantee that patient's security and respect is kept up., The association will make the rules which are required.
CS 2	The Lab diagnostic services, whether in house or outsourced, should be as per the scope of services	AAC 6,AAC7, AAC8	**AAC 6**-Laboratory services are provided as per the scope of services of the organisation. **AAC 7**-There is an established laboratory quality assurance programme. **AAC 8**-There is an established laboratory safety programme.
CS 3	Blood bank administrations which ought to be according to the legal standards	COP 8	**COP 8**- Documented policies and procedures define rational use of blood and blood components.
CS 4	The hospital should adhere to the Radiation safety precautions as per the regulatory norms	AAC 9,AAC 10, AAC 11	**AAC 9**-Imaging services are provided as per the scope of services of the organisation. **AAC 10**-There is an established

			quality assurance programme for imaging services. **AAC 11**-Established safety program in Imaging services.
CS 5	Intensive Care Unit (ICU) services should be available as per the scope of services along with the required Infrastructure and Manpower.	COP 9	**COP 9**- recorded approaches and strategy control the consideration of patients in ICU and HDU.
CS 6	OT complex should be available as per the regulatory requirements	COP 15 K	**COP 15 K**- The quality assurance programme includes surveillance of the operation theatre environment.
CS 7,CS 8	**CS 7**- Medicines that looks alike and sounds alike should be identified and kept separately to avoid any dispensing and administration errors. **CS 8-** Policies and procedures for identification, self-dispensing and administration of all high-risk medicine should be documented and implemented	MOM 3,MOM 5 MOM 6,MOM 7 MOM 8, MOM 13	**MOM3**- Documented policies and procedures guide the storage of medication. **MOM 5-** Documented policies and procedures guide the safe dispensing of medications. **MOM 6**-There is documented policies and procedures for medication administration. **MOM 7**-Patients are monitored after medication administration. **MOM 8**-Near misses, medication errors and adverse drug events are reported and analysed. **MOM 13**- Documented policies and procedures guide the use of medical supplies and consumables.
CS 9	The facility has defined and established antibiotic policy	HIC 2 G,HIC 2 H	**HIC 2 G**-An appropriate antibiotic policy is established and documented **HIC 2 H**-The organisation implements the antibiotic policy and monitors rational use of antimicrobial agents.
CS 10,CS 11	**CS 10-** Pre-operative, Intra-operative and Post-operative assessment should be done and documented by appropriately qualified staff in standardized format. **CS 11**-Pre-Anaesthesia assessment, type of Anaesthesia and Post Anaesthesia status should be documented.	COP 14	**COP 14-** Documented policies and procedures guide the administration of anaesthesia

The primary standard of clinical administrations is about patient protection which ought to be kept up in OPD and IPD, and was contrasted and the PRE2B of NABH which says that During all phases of patient consideration, be it in assessment or doing a methodology, emergency clinic and staff will guarantee that patient's security and respect is kept up., The association will make the rules which are required.

The CS2 is about the Laboratory administrations, regardless of whether in house or redistributed, ought to be according to the extent of administrations and interestingly the AAC6, AAC7, AAC8 states Laboratory administrations ought to be given according to the extent of administrations of the association , There ought to be built up quality affirmation program, and a set up Laboratory security program.

CS3 is about the Blood bank administrations which ought to be according to the legal standards and it was contrasted and COP8 of NABH which is that we ought to have archived arrangements and methodology characterizing levelheaded utilization of blood and blood segments.

CS4 is about the radiation wellbeing insurances which emergency clinic ought to follow according to the legal standards and interestingly AAC9, AAC10, AAC11 says Imaging administrations are given according to the extent of administration of the association, and there ought to be a set up quality affirmation program for imaging administrations, and a built up security program.

CS5 is ICU administrations ought to be accessible according to the extent of administrations alongside the necessary foundation and labor and in examination COP9 of NABH states recorded approaches and strategy control the consideration of patients in ICU and HDU.

CS6 states that OT complex ought to be accessible according to the administrative necessity and conversely COP15K states that observation exercises incorporate the every day checking of dampness and temperature; in any event month to month checking of weight differential, and at any rate six month to month observing of the uprightness of channel.. For the cooling in OT rules of NABH can be alluded.

CS7, CS8 is about the prescriptions which look and sound the same, they should be recognized and arranged independently to maintain a strategic distance from any administering and organization mistakes, and strategies and methods for their distinguishing proof, self-apportioning and organization of all high hazard meds ought to be archived and executed… , and interestingly MOM3, MOM5, MOM6, MOM7, MOM8, MOM13 express that recorded approaches and methodology manage the capacity of medicine, direct the safe administering of meds, drug organization, utilization of clinical supplies and consumables, patients are observed after medicine organization, Near misses, prescription blunders and unfavorable medication occasions are accounted for and examined.

CS9 states that office ought to have characterized and set up Antibiotic approach and in correlation HIC2G, HIC2H says that the association will build up an arrangement of checking antimicrobial helplessness and appropriately create anti-toxin strategy, and ought to recognize clinical conditions in which antimicrobial specialists will be utilized as far as sort of the antimicrobial operator.

CS10,CS11 states that Pre-employable, Post-usable, and Intra-usable appraisal ought to be done and archived by fittingly qualified staff in normalized organization.., and Pre-sedation and Post-sedation evaluation ought to be recorded conversely COP14 of NABH states that reported strategies and systems direct the organization of sedation.

Table 5- Comparative Analysis of Chapter 3, Support Services of AB-PMJAY with NABH.

Chapter-3 Support Services			
SS 1	Hospital should be clean and have well managed flooring	HIC	It is covered in HIC
SS 2	Temperature control and ventilation should be maintained in patient care and nursing area	FMS 3 I	**FMS 3 I**-There is a maintenance plan for heating, ventilation and air-conditioning.
SS 3, SS 4	**SS 3**-Water should be arranged in hospital and also stored properly. It should be tested time-to-time. **SS 4-**The hospital should have 24 h long stretches of power, either through direct flexibly or from different sources and interestingly	FMS 2 F, FMS 2 G	**FMS 2 F**-Potable water and electricity are available round the clock **FMS 2 G**-Alternate sources for electricity and water are provided as backup for any failure / shortage.
SS 5	Medical gases and vacuum shall be made available all the time and sorted safely. Compressed gas should be made available as per requirement.	FMS 5	**FMS 5**- The organisation has a programme for medical gases, vacuum and compressed air.
SS 6	The facility should adhere to the practices specified under statutory compliances as per the scope of services - Licenses with Certificate number, date of issue and date of expiry.	ROM 2 E	**ROM 2 E**- There is a mechanism to regularly update licenses/registrations/certifications.
SS 7	The hospital should ensure that appropriate Infection control practices are being followed along with hand hygiene practices	HIC 1,HIC 2, HIC 3,HIC 9	**HIC 1**-The organisation has a well-designed, comprehensive and coordinated Hospital Infection Prevention and Control (HIC) programme aimed at reducing/eliminating risks to patients, visitors and providers of care **HIC 2**- The organisation implements the policies and procedures laid down in the Infection Control Manual in all areas of the hospital. **HIC 3**- The management performs surveillance activities to

			capture and monitor infection prevention and control data. **HIC 9**-The management supports infection control programme and also conducts training for staff.
SS 8	Hospital should ensure Bio-medical waste management practices as per the statutory norms(BMW amendment rules 2018)	FMS 4	**FMS 4**- The organisation has a programme for bio-medical equipment management.
SS 9	Hospital should ensure that services i.e. (Laundry, Housekeeping, Dietary, security, Ambulance, Mortuary, Central Sterile Supply Department (CSSD)etc. are available (in-house or outsourced)	HIC, COP	Dietary and Ambulatory services comes under COP, and Housekeeping and Laundry is covered under HIC
SS 10	Sexual abuse and grievance handling procedure should be available.	HRM 6	**HRM 6** documented policies for grievance handling .

The main quality standard of help administrations expresses that Hospital ought to have spotless and all around oversaw flooring and In compare Housekeeping is secured under HIC.

SS2 states that temperature control and ventilation ought to be kept up in understanding consideration and nursing region and in examination FMS3I of NABH states this will incorporate chiller unit, AHU, FCU, and different forced air systems. This will hold fast to maker's suggestions and acceptable disease control practice prerequisite. This incorporates convenient cleaning as well as substitution of channels.

SS3 and SS4 says that the emergency clinic ought to have plan of water and ought to be tried occasionally according to necessity and the medical clinic ought to have 24 h long stretches of power, either through direct flexibly or from different sources and interestingly FMS2F,FMS2G states that the association will make game plans for gracefully of satisfactory consumable water and power. The quality of water is checked as often as possible and recorded and… , Alternate hotspots for power and water are given as reinforcement to any disappointment/lack.

SS5 says that clinical gases and vacuum will be made accessible constantly and put away securely. Packed air ought to be made accessible according to extent of administrations… , and in correlation FMS5 states that the association has a program for clinical gases, vacuum and compacted air.

SS6 says that the office ought to hold fast to the practices indicated under legal consistence according to the extent of administrations. Permit with authentication and conversely ROM2E of NABH says permit for drug store, opiates, clinical built up act and so on. The association could create tracker sheet for this reason. Applications to refresh these legal archives must be made as per the courses of events set out in the significant/enrollment authority necessities to guarantee congruity of legal consistence.

SS7 states that the medical clinic guarantee that suitable contamination control rehearses are being tracked with hand cleanliness rehearses and in gather HIC1, HIC2, HIC3, HIC9 says that, The association has a very much planned, extensive and facilitated emergency clinic Infection and Control (HIC) program planned for decreasing/taking out dangers to patients, guests and suppliers of care.., The association executes the strategies and systems set down in the Infection Control Manual in every aspect of the medical clinic… ,The association performs reconnaissance exercises to catch and screen disease avoidance and control information..,.

SS8 states emergency clinic ought to guarantee Bio clinical waste administration rehearses according to the legal standards (BMW revision rules, 2018) and in examination FMS4 of NABH states that The association has a program for bio-clinical gear the executives.

SS9 says that medical clinic ought to guarantee that all the administrations like clothing, housekeeping, dietary, security, rescue vehicle, funeral home, focal clean flexibly office (CSSD) and so on are available(in housed or redistributed) and in Contrast in NABH dietary and emergency vehicle is secured under COP and Housekeeping and Laundry under HIC.

SS10 says that lewd behavior and complaint taking care of technique ought to be accessible and interestingly HRM6 says that ,the association has archived disciplinary and complaint taking care of and methods

Table 6- Comparative Analysis of Chapter 4, Patient Care of AB-PMJAY with NABH.

Chapter-4 Patient Care			
PC 1,PC 2	**PC 1**-Hospital should have uniform and user friendly signage system in English and in the local language understood by Patient / family and community. **PC 2**- All Signage's those are required by law should be displayed at all strategic location	FMS 2 C	**FMS 2 C**-Internal and external sign postings in the organisation in a language understood by patient, families and community.
PC 3	Contact information of key medical staff and specialist should be readily available in the emergency department.		This is already implemented in NABH
PC 4	Service counters for the enquiry are		This is already implemented in

	available as per the patient load and are duly managed by hospital staff for the registration of patients		NABH
PC 5	Hospitals should have established procedure for admission on patients.	AAC 2	**AAC 2-**The organisation has a well-defined registration and admission process.
PC 6	Referral of patients to another facility along with the documented medical information, in case of non-availability of services and/or beds.	AAC 3	**AAC 3-**There is an appropriate mechanism for transfer (in and out) or referral of patients.
PC 7	General consent and Informed consent should be taken during the admission and before any procedure/surgery and Anaesthesia/Sedation	PRE 4	**PRE 4-**A documented procedure for obtaining patient and/or family's consent exists for informed decision making about their care.
PC 8	User charges are displayed and communicated to patients effectively at the time of registration, admission to the ward and in case of a change in medical and surgical plan.	PRE 6	**PRE 6-** Patients and families have a right to information on expected costs.
PC 9	Patient should be properly educated on additional care as deem required and all the vital information should be recorded for continuity of care	PRE 3	PRE 3- The patient and/or family members are educated to make informed decisions and are involved in the care planning and delivery process.
PC 10	Hospitals should ensure that all medications and associated instruction are written in prescription.	MOM 4	**MOM 4-** Documented policies and procedures guide the safe and rational prescription of medications.
PC 11	Medical record should be retained as per the policies of hospitals based on national and local law.	IMS 3,IMS 4	**IMS 3-** The organisation has a complete and accurate medical record for every patient. **IMS 4-**The medical record reflects continuity of care.

The first and second standard of patient consideration expresses that emergency clinic ought to have uniform and easy to understand signage framework in English and in neighborhood language comprehended by tolerant and network and all the signage ought to be there which are required by the law at all key areas. Conversely FMS2C of NABH says that there ought to be inner and outer signage in the association should be in a language which is comprehended by patients, families a network, it ought to be bilingual.

PC3 states that Contact data of key clinical staff and master ought to be promptly accessible in the crisis division, and in NABH it is viewed as executed

PC4 says administration counters for the enquiry are accessible according to the patient burden and are appropriately overseen by emergency clinic staff for the enlistment of patients and in NABH it is actualized.

PC5 states that the patient ought to have a built up strategy for confirmation and in gather AAC2 says that the association has a very much characterized enrollment and affirmation process.

PC6 shows restraint ought to be alluded to another office alongside the recorded clinical data, in the event of non-accessibility of administrations and additionally beds and interestingly AAC3 of NABH has a proper instrument for move (in and out) or referral of patient.

PC7 says that general assent and educated assent ought to be taken during the affirmation and before any system/medical procedure and sedation/sedation and in compare PRE4 states that there ought to be a reported methodology for acquiring patient and family's assent exists for educated dynamic about their consideration.

PC8 is about the client charges that ought to be shown and imparted to patients successfully at the hour of enlistment, admission to ward and if there should be an occurrence of progress in clinical and careful arrangement and interestingly PRE6 of NABH says that patient and family reserve a privilege to data on anticipated expenses.

PC9 says that patient ought to be appropriately taught on extra mind as consider required and all the crucial data ought to be recorded for progression of care and in PRE3 it is tied in with instructing patients and relatives to settle on educated choices and are engaged with the consideration arranging and conveyance process.

As per PC10 emergency clinics ought to guarantee that all drugs and related directions are written in remedy and in MOM4 it is said that archived approaches and systems manage the protected and objective solution of meds.

PC11 is about the clinical records, they ought to be held according to the arrangements of medical clinic dependent on national and nearby law.

Table 7- Comparative Analysis of Chapter 5, Health Outcomes of AB-PMJAY with NABH.

Chapter-5 Health Outcomes			
HO 1	Evaluation of OPD and IPD patients per month.	CQI	Bed occupancy is mandatory indicator in NABH
HO 2	Mortality Rate and Average length of stay	CQI	Data collection is done on monthly basis.
HO 3	Infection Rates - Surgical Site, Urinary Tract, Bloodstream, Ventilator Associated Pneumonia (VAP)/Hospital Acquired Infection(HAI)	HIC 4,HIC 5	**HIC 4**- Measures for preventing and controlling Healthcare Associated Infections (HAI) in patients are taken. **HIC 5-** Sufficient resources for prevention and control of Healthcare Associated Infections (HAI) .
HO 4	Transfusion reaction (if applicable)	CQI 3 F	**CQI 3 F**-Monitoring of blood and blood components.

HO 5	Bed occupancy	CQI 4 C	**CQI 4 C-**Utilization of space, manpower and equipment are monitored.
HO 6	Percentage of Patient satisfaction	CQI 4 D	**CQI 4 D-** Patient satisfaction is monitored including waiting time for services.
HO 7	Percentage of Employee satisfaction	CQI 4 E	**CQI 4 E-**Monitoring includes satisfaction of employee.
HO 8	Holding up time-OPD and release	CQI4 D	**CQI 4 D-** Patient satisfaction is monitored including waiting time for services.
HO 9	Reporting of Adverse events	CQI 4 F	**CQI 4 F-**Monitoring includes adverse events and near misses.
HO 1O	Reporting of Thefts / Security related incidents.	IMS 5	**IMS 5-**Documented policies for maintaining confidentiality, integrity and security of medical records, data and information of patients and they are monitored under CCTV.
HO 11	Reporting of Needle stick injuries.	HRM 4 A, HRM 4D,CQI4F	**HRM 4 A** –Training of staff for the risks within the organization's surroundings. **HMR 4 D-** Staff are trained occupational safety aspects. **CQI 4 F-** Adverse events and near misses are monitored.

The principal standard of wellbeing result is about the month to month out-persistent and in-quiet evaluation and in NABH Bed inhabitance is an obligatory pointer.

HO2 is about the death rate and normal length of remain and in examine information is gathered on month to month premise in NABH.

HO3 is about the contamination rates and in HIC4, HIC5 of NABH the association takes activities to forestall and control social insurance related diseases (HAI) in patients and furthermore give satisfactory and fitting assets.

HO4 portrays the transfusion response and in examination CQI3F of NABH says that the association ought to have proper key execution marker reasonable to it.

HO5 is for the bed inhabitance and it is contrasted and CQI4C which says that observing incorporates use of room, labor and gear.

HO6 is level of patient fulfillment and is contrasted and CQI4D in which observing is done which incorporates quiet fulfillment and fuse hanging tight an ideal opportunity for administrations. HO7 is level of worker fulfillment and conversely is CQI4E which screens representative fulfillment.

HO8 is holding up time-OPD and release which is contrasted and CQI4D in which observing is done which incorporates quiet fulfillment and join sitting tight an ideal opportunity for administrations.

HO9 is about the detailing of unfavorable occasions and in examine CQI4F of NABH states that there ought to screen of unfriendly occasions and close to misses.

HO10 is tied in with announcing robbery/security related occurrences and conversely there is strategy and technique for keeping up the classification, trustworthiness and security of record, information and data in IMS 5 of NABH.

HO11 is about the needle stick wounds and is contrasted and CQI4F, HRM4A, HRM4D which says that there ought to screen of unfavorable occasions and close to misses and staff is likewise prepared on the dangers inside the association's condition and word related security perspectives.

Chapter-6 Conclusion

It is concluded that AB-PMJAY broadly covers all the quality standards of NABH. From the comparative analysis of both AB-PMJAY and NABH it is also concluded that the scope of NABH is very wide and descriptive. NABH comprises of indicators and AB-PMJAY says to do things. NABH emphasizes on System, Process and outcomes equally but AB-PMJAY doesn't. There are more financial resources required in NABH and also the quality budged need to be maintained and regularly updated. Many standards of AB-

PMJAY are considered as already implemented in NABH. The hospital's with NABH's full accreditation can directly apply for AB-PMJAY Gold quality certification.

Limitation of study

1-As the study is being conducted in a medical college and a corporate hospital hence generalization of the study finding is limited.

2-Owing to Corona threat and pandemic, many staff and officers were on rotation duty and hence training schedules were being conducted online hence feedback was not collected.

3-Only morning time Outpatient were running, hence the satisfaction and other data sheets may have bias or skewing of data.

Bibliography

1- Weiner BJ, Alexandar JA, Backer LC, Shortell SM, Becker M, Geppert JJ. Quality improvement implementation and hospital performance on quality indicators. Health Serv Res.2006 April;41(2):307-34. Available from: https://www.ncbi.nih.gov/pmc/articles/PMS1702526.

2- Valas S, David SN. National Accreditaion Board for Hospital and Healthcare providers(NABH) standards: A Review. Medical issues. 2017;15(3); 231-236. Available from: https://www.cmijounal.org/article.asp
3- QCI, Guidebook for AB-PMJAY Quality Certification.2019 [cited 2020 January):65 Available from: https://www.pmjay.gov.in
4- QCI, Guidebook on how to achieve Bronze Quality Certification. Ayushman Bharat Pradhan Mantri Yojana.2019:40. Available from: https://www.pmjay.gov.in
5- QCI, Guidebook on how to achieve Silver/ Gold Quality Certification. Ayushman Bharat Pradhan Mantri Yojana.2019:101. Available from: https://www.pmjay.gov.in
6- NABH. Accreditations Standards for Hospital.2015;4th^ edition:234 Available from: https://www.nabh.co
7- QCI, National Accreditation Board for Hospitals and Healthcare Providers. Available from: https://www.qcin.org

PART-2 : Online Course Report

Name of course- eHealth: More than just an electronic Record (offered by University of Sydney, and it is a 15 hours course by Coursera.)

Course description- eHealth is a wide term, and alludes to the utilization of data and correspondences innovations in medicinal services. This course incites some great speculation around the stars cons of innovation. This course investigates how eHealth acquires wellbeing everybody's hand. Making an arrangement for gathering own information. This course will cause us to find out about Data and the "Evaluated Self" and how to utilize eHealth in Professional Practice

.

Objectives of the course-

● How to increase awareness or promote eHealth.

● To explore evidence behind the impact the use of apps, Wearable device, social media on health.

● What sort of information are we at present gathering and how it will change medicinal services in future.Course contents-

S.no	Module	Date	Week	Hours of each module
1	**Module 1- What is eHealth**	June 3,2020	1	1 hour 26 min
a	Lesson 1- An introduction to eHealth	June 3,2020		
b	Lesson 2- What the experts say	June 3,2020		
c	Lesson 3- Introductory learning activities	June 3,2020		
2	**Module 2- Health in our Hands**	June 5,6,2020	2	2 hours
a	Lesson 1-Health in your hands	June 5,2020		
b	Lesson 2- Collecting your own data	June 5,2020		
c	Lesson 3- Apps, social media and health online	June 6,2020		
d	Lesson 4- Designing and evaluating eHealth solutions	June 6,2020		
3	**Module 3- Data and the "Quantified Self"**	June 7,8,2020	3	1 hour 30 min
a	Lesson 1- Introduction	June 7,2020		
b	Lesson 2- Electronic health records	June 7,2020		
c	Lesson 3- Predictive and precision medicine	June 7,2020		
d	Lesson 4- Patient reported data	June 8,2020		
e	Lesson 5- Privacy and Security	June 8,2020		

f	Lesson 6- Using data to improve performance	June 8,2020		
4	**Module 4- Interacting with health professionals using New Technologies**	June 9,2020	4	1 hour 30 min
a	Lesson 1- Improving access to healthcare	June 9,2020		
b	Lesson 2- Innovations in healthcare	June 9,2020		
c	Lesson 3- Supporting health professionals	June 9,2020		
5	**Module 5- eHealth in Professional Practice**	June 11,12,2020	5	2 hours 50 min
a	Lesson 1- Course review	June 11,2020		
b	Lesson 2-eHealth case study example	June 11,2020		
c	Lesson 3-Assignment guide and peer review	June 11,2020		
Total Hours hours				**15**

Learning Methodology

Module 1-

Video:-

Lesson 1-

- What is eHealth?
- What does eHealth mean to you?
- A model for eHealth

Lesson 2-

- Challenges
- The future

Activity:-

Activity 1- Learn about current and futuristic examples of eHealth technologies in practice (Practice Quiz)

Activity 2- Learn about the eHealth model via examples from clinical practice (Practice Quiz)

Activity 3- Recount an eHealth experience you have had (Discussion Prompt)

Activity 4- eHealth in action videos (Reading)

Reading Material:-

Instructions
References and further resources

-In this module eHealth was explained and what does it mean to us and how we use technology for the communication. A model for eHealth was given in which we identified three overlapping domains, and it was also mentioned that combination of one or more of these domains are required to ideally develop a program. The major challenge of eHealth is in implementation. In future the demand of eHealth will sure increase as people these days want to keep track of their own health.

Module 2-

Video:-

- Health in our hands
- Health not healthcare
- Wearables: Collecting your own data
- Clinical use of personal health data
- Mobile apps for heath
- Social media for health
- Health information online
- Co-design of eHealth solutions
- Evaluating health apps

Activity:-

Activity 5- Learning about current trends in internet and communications technology (ICT) (Practice Quiz)

Activity 6- How have you (or someone you know) used mobile technology for health or healthcare? (Discussion prompt)

Activity 7-Do you have a favourite health app? (Discussion Prompt)

Reading Material:-

Instructions

References and further resources

Assignments:-

Assignment 1- Reviewing a health app

-People are ready to take care of their own health and they want health in their own hands which they can do with the help of apps, wearable devices, online health info., and social media. Wearable devices will make tracking the health easy. Healthcare professional should also support the patients in keeping track of their own health rather then dictating them. Data can be collected with the help of mobile phones, fitness bands, phone, running apps, sleep tracker, Fitbit etc. These devices can be used for clinical uses too. Mobile

apps for health can help in assessment and also provide treatment support for remote monitoring and data support. People also use social media to share their data and connect with others and it connect people globally and locally.

Module 3

Video:-

- Data and Quantified-self
- Data and digital health record
- Anatomy of a digital health record
- Predictive and precision medicine
- Big data from our biology and environment
- Owning your own data
- Patient reported data in practice
- Privacy and security- should we be worried?
- Using data to improve our performance

Activity:-

Activity 8- Learn about current trends in electronic data in healthcare (Practice Quiz)

Activity 9- Where is your health data and who owns it currently? (Discussion Prompt) 5 min

Reading Material:-

Instructions

References and further resources

Case study:-

Electronic records supporting remote care.

-eHealth focuses on relating the data with all devices and apps. Digitalizing medical record helps to enable a patient' medical history to be track on time and also improve quality of care. Implementing of electronic health record is very advantageous but at the same time it is very challenging because it's implementation is very difficult. Improvements in data storage analysis and presentation is giving us new and expanded forms of knowledge. Patient's are the experts, they are the people who know themselves best and they have a great opportunity to be able to contribute info.and manage it.

Module 4

Video:-

● Interacting in new ways
● Improving care: Ten eHealth advantages
● Face-to-face vs. online
● Telehealth and new models of healthcare
● When healthcare and social media intersect
● Using apps to personalize healthcare
● eHealth enabled professional development
● How do we enable interdisciplinary eHealth?

Activity:-
Activity 10- Learn about how health professional are using technology to interact (Practice Quiz)
Activity 11- How are doctors using ICT in their clinical practice now (2015)? (Practice Quiz)

Reading Material:-
Instructions
References and further resources

-Inspite of all the advances in technology, we have not yet, nor should we ever, replace the need for health professional and patients to communicate with each other. There is not much difference between face-to-face and online. Telehealth and new health models are being adopted by the people. Using apps to personalize health care is really good because it makes treatment easy as all data can be available and the time required is also less and the treatment can be given in any remote area.

Module 5
Videos:-
● Course review
●Using the 'MyPhysio' app

Case study:-
● Electronic reports supporting remote care
● Physios Online
● The 'My Home Dialysis' program
●'Synergy' online hub for mental health and well-being
● Supporting wellness after cancer treatment

Assignment:-

Assignment 2- A practice based eHealth case

Reading Material:-

Instructions

-Few case studies were explained that how eHealth is a better option.

KEY LEARNINGS-

●eHealth is turning out to be conceivable nowadays. It is essentially, utilizing innovation to help individuals in dealing with their wellbeing. It ranges from Fitbits to careful robots and helping specialists to perform medical procedure utilizing robots. The greatest test eHealth face is in its execution. It is a drive towards patients coordinated wellbeing conveyance and direct patient.

●eHealth makes treatment simple in the genuine conditions since when there is a crisis it's simple for specialists to treat any patient whose clinical history he have on his/her PC screen instead of in clinical records.

●Telemedicine, telehealth is getting things to us our homes and it will require an adjustment in our mentality. It makes our primary care physicians effectively open.

These wearable gadgets are utilized to follow execution, diet, resting designs, and pretty much every possible wellbeing metric. It is truly energizing and ground-breaking as it helps in caring for our own wellbeing and taking own choice

● The utilization of applications, cell phones, sensors is ordinarily alluded to as mHealth or Mobile Health and it speaks to a huge and regularly changing part of eHealth. Following information utilizing gadgets, sensors, and applications can tenderly guide individuals with explicit condition to be appropriately observed and advance a wellbeing propensity for seeing a wellbeing proficient when essential.

●Level of assessment is significant when we're utilizing the instruments to gauge explicit factors, for example, scope of movement. The utilization of wellbeing information has such huge numbers of recommendations for how social insurance is conveyed and how we deal with our wellbeing. The entire human services industry is showing signs of improvement, whereby access and usage of immense measures of information is turning out to be increasingly available.

● The effect that eHealth is having on conveyance of medicinal services right presently is very sensational, and here and there troublesome. Wellbeing data is accessible over the whole system.

●Social media interfaces us internationally and locally, and there are six fundamental classes:-

- Blogs
- Collaboration
- Social Networking (Twitter, Facebook)
- Content people group (YouTube)
- Virtual social universes
- Virtual game universes

At the point when online networking and medicinal services converge it turns out to be simple for everybody to share their issues or to manage them with other's assistance. Blogging is additionally a way which offers freedom to truly impart data to individual in a reasonable manner, that is basic, straight forward, and simple to process

●Inspite of all the mindfulness in innovation, the requirement for wellbeing experts and patient to speak with one another can't be supplanted.

●There is really not a lot of contrast between online counsels and eye to eye. In online counsels, patients self-treat themselves all the more frequently in online space in light of the fact that the instruments are given which can be utilized by own.

●eHealth brings tolerant improvement, treatment turns out to be simple and furthermore can without much of a stretch know patient's point of view.

Bibliography -University of Sydney. eHealth: More than only an electronic record. Coursera. Accessible from:- https://www.coursera.org/learn/ehealth