

**Internship report on
HMIS AND EMR Application System**



submitted to

EYE-Q Vision India ,Gurgaon

for the partial fulfilment for the award of the degree of
Master of Business Administration (MBA)

in

Hospital and Health Management

by

Dr. Nikita Arora

Academic year 2019-2021

Under the Supervision and Guidance of
Dr. Yashika Sharma

2021



DECLARATION

I hereby declare that this Internship titled “**HMIS AND EMR Application System**” is the Bonafede record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

Dr. Nikita Arora

Date: June 21, 2021

A handwritten signature in black ink that reads "Nikita Arora".

ACKNOWLEDGEMENT

The opportunity provided to do dissertation at **EYE-Q INDIA, Gurgaon** was an enriching and valuable experience. I am highly obliged to have met so many experience professionals who led me throughout my study period I am sincerely grateful to them for sharing their truthful and illuminating views on several issues related to the project.

I would like to acknowledge, first and foremost **Mr. Sachin Wangoo (Head IT) and Dr Yashika Sharma (Implementation manager Healthcare-IT)** who inspired, guided, and helped me to complete my project at their respected organization, I take this moment to recognize their contribution gratefully.

I am extremely thankful to my faculty at IIHMR- Jaipur and specially my **Mentor Dr. Nutan P Jain (Professor)** for being my support all through the internship.

I recognize this opportunity as a big milestone in the development of my career. I will strive to use the knowledge and skills gained in the best possible way.

Lastly, I want to express my respect and love to my parents, siblings, and my friend **Mr. Chandan Gulati** for constant encouragement and motivation in my higher studies.

Sincerely,

Dr. Nikita Arora

COMPREHENSIVE EYE EXAMINATIONS & LATEST FACILITIES FOR

- *PHACO (STICHLESS CATARACT SURGERY)
- *ZYOPTIX LASIK LASER (SPECTACLE REMOVAL)
- *PHAKIC IOL
- *TRAUMA
- *CONTACT LENSES

SUPER-SPECIALITY CLINIC FOR

- *CORNEA
- *RETINA
- *GLAUCOMA
- *SQUINT & OCULOPLASTY
- *PAEDIATRIC & NEURO OPHTHALMOLOGY



EYE-Q
SUPER-SPECIALITY
EYE HOSPITALS

14-Jun-21

CERTIFICATE

This is to certify that **Nikita Arora** in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IHMR University, Jaipur has successfully completed her internship at Eye-Q Vision Pvt Ltd. during **22-Mar-21 to 10-May-21**.

Authorized Signatory



Sumit Bhasin
Vice President - HR
Eye-Q Vision Pvt. Ltd.

EYE-Q VISION PRIVATE LIMITED

Corporate Office : First Floor, Nursing Home 1, Sector - 46, Gurgaon - 122 002 | Tel. : 0124-4245460

CIN NO. U85121DL2006PTC152865

Registered Office : UG1, Suneja Tower 1, Janakpuri District Center, Janakpuri, Delhi-110058

Website: www.eyeqindia.com

NIKITA ARORA

4

INTERNSHIP REPORT



1. INTRODUCTION:

Internship is integral part of MBA- Hospital and Healthcare Management curriculum in which we have to learn and observe the culture of the work organization. In this internship period it is necessary to participate in various activities of the department so that by this we get exposure various inter-related departments and understand the work done in the organization, and then to understand the process flow and thereafter be able to involve in decision making.

I started my internship on 22nd March, 2021 at Eye Q- Vision India Pvt. Ltd. , Gurgaon in healthcare application management area with vision in my mind so as be able to learn the practical aspects of the healthcare information system in more detailed manner. I learnt the core values and best practices of Eye- Q Vision India. I was trained about healthcare management information system and Electronic Medical records with use of product Eye-tech used in the organization.

I understand the EMR and HMIS and their various process and modules like OPD, IPD, Pharmacy, Optical. I visited the eye centres of the Organization located in the Gurgaon and understand the workflow of the patients and HMIS system used in the centres closely.

2. GOALS OF INTERNSHIP

- To understand the work culture of Eye-Q India and its organizational structure.
- To assist the manager in day-to-day operations. Through this process it is expected to gain practical knowledge and skills to handle managerial issues related to major activities of the organization.
- To observe the various skills in the organization and try to acquire the skills to accomplish them.

- To observe the mannerism of the existing employees and learn the culture of the organization. Inculcating the soft skills is an integral part of understanding the organization. Observing human skills.
- To identify a specific problem area/ area of interest or department (for example – HR department, Finance, Supply chain , Operations department).
- To diagnose the problems in operational area and resolving of tickets.
- To provide the management with set of alternative solutions.
- If possible, design and implement a plan to carry out feasible solutions.

3. ABOUT THE ORGANIZATION:

The Eye-Q hospital chain is committed to providing best quality eye care at affordable cost across India. They are an ISO 9001-2015 registered organization operating under the leadership of their Founder and CMD- Dr. Ajay Sharma- one of the most renowned eye surgeons in India, aided by a team of specialists with rich experience in their respective specialties from top hospitals across the country.

Established in 2007, Eye-Q is today a chain of 39 super specialty eye hospitals with centres in Delhi-NCR, Haryana, Uttar Pradesh, Uttarakhand, and Gujarat. Also, one centre in Lagos, Nigeria.

VISION

To be India's foremost chain of eye hospitals in terms of both Quality of eye care and the Number of patients handled.

MISSION

To make every patient an Ambassador for Eye-Q through a combination of

- Highest level of quality and technology in eye care.
- Exceptional personal care.
- Complete integrity to the patient and his/her needs.

VALUES

- Be honest and open in my communication and do what I say I will do.
- I accept our individual & team responsibility and meet my commitments each & every time.
- Our clinical & nonclinical team is supportive of each other's efforts and care for each other.
- Give care, compassion & respect to patients and colleagues as I expect for myself.
- Will make conscious effort to contribute to creating a social impact.
- Will embrace and drive positive change.
- Proud of Eye Q

4. Eye Q at glance

- With a thought to serve the society, our company founder Dr. Ajay Sharma (CMD) along with Mr. Rajat Goel (CEO) incorporated Eye-Q India on 14 January 2007.
- Our First Operational Eye-Q Hospital started in Rewari (Haryana).
- Eye-Q provides both qualitative and affordable healthcare across India.
- We are an ISO 9001-2000 registered organization.

The Eye-Q Hospitals Network



GURGAON
Near Galleria Market



GURGAON
Sheetla Hospital, New Railway Road



REWARI
Garhi Bolni Chowk



ROHTAK
Opposite Maruti Showroom



HISAR
Barwala Road, Tayal Garden



FATEHABAD
Model Town, Near Bus Stand



YAMUNA NAGAR
Near Sapphire Hotel



HALDWANI
B/6, Nainital Road, Bhotia Paraow



ROORKEE
Chanderpuri, Near Sindi Sweets



LUCKNOW
NH-2, Vipul Khand IV, Gomti Nagar



LUCKNOW
B-60, Sector-B, Aliganj



SAHARANPUR
Hakikat Nagar Mod, Sadar Thana Road



MUZAFFAR NAGAR
Civil Lines South



SURAT
Rander Road



SURAT
Udhana



BHIWANI



HISAR 2nd UNIT



VIJAY NAGAR, LUCKNOW



SOUTH-EXTENSION, DELHI



5. EYE-Q CLINICAL SPECIALTIES

CATARACT SURGERY: Cataract is a disease which mostly occurs in the elderly population. Cataract requires immediate doctor advice to get the treatment. EYE-Q offers laser automated technology for Cataract surgery which is a bladeless and painless method. EYE-Q doctors have successfully treated cataract patients and again brought back life to their vision.

LASIK SURGERY: Lasik surgery is the best way to get rid of the eyeglasses. EYE-Q hospitals offer comprehensive detailed eye check up to check whether the patient is suitable for LASIK surgery or not. The check-up ensures that the patient is completely fit to undergo treatment. EYE-Q doctors have a decade of experience in performing surgery.

RETINA TREATMENT: Retinal tearing and retinal detachment are treated using retinal surgery which is combined using laser photocoagulation and retinal freezing cryopexy techniques. EYE-Q offers treatment which is best suited to patient requirements. EYE-Q eye doctors have successfully performed retinal surgeries without any complications.

PEDIATRIC SERVICES: Squint and Amblyopia fall under pediatric eye disease which requires early treatment. EYE-Q eye specialists are trained for pediatric eye care which is generally different in approach with respect to the adult patients. Best technological equipment is present for visual evaluations of children and its correction.

OPTICAL SERVICES: Optical services are offered at EYE-Q hospitals. Our experienced optometrists are professionally qualified to deliver quality services to the clients. EYE-Q has invested in faster glazing machines to offer the best spectacles and contact lenses for the patient with vision problems. Eye-Q has collaborated with Pinnacle optical Pvt Ltd.

GENERAL EYE CARE: General eye care deals with a routine check-up and common eye problems such as dry eyes, conjunctivitis etc. EYE-Q hospitals have a world-class infrastructure to cater to the needs of the patients. Doctors have vast experience in offering solutions to patients for eye care and treating general eye problems.

DIABETES EYE CARE: Diabetic retinopathy is a serious condition of the retina that could lead to blindness in diabetic patients. Our hospitals across India cater to the eye care of



diabetic patients which is focused on early diagnosis and management of disease by our experienced doctors who have more than decade of experience in serving diabetic patients.

REFRACTIVE SERVICES: Refractive defects include myopia, hypermetropia, and astigmatism which generally occurs due to refractive errors leading to vision defects. Refractive services include Lasik surgery which is a tried and tested method for refractive errors. EYE-Q dedicated team of doctors have years of experience in treating the patients.

CONTACT LENSES: Contact lenses are alternative to Eyeglasses which offer great relief to the people with refractive error defects. Contact lenses are hassle free and offer crystal clear vision. Our experienced optometrists evaluate and provide lenses for correcting refractive errors such as myopia, hyperopia, and astigmatism.

OCULOPLASTY SERVICES: Oculoplastic surgery is offered as a cosmetic, corrective and reconstructive eye surgery in cases of retinoblastoma and ocular-orbital eye defects. EYE-Q offers comprehensive and contemporary approaches for diagnosing and treating eye defects. EYE-Q surgeons have more than a decade of experience for treating eye patients and providing them with post-operative care.

SQUINT SURGERY : Squint (Strabismus) is a condition which arises due to an incorrect balance of muscles, refractive errors, nerve palsy, and several other reasons. Our hospitals have experienced eye doctors for child's evaluation and treatment. Squint Surgery is day-care surgery with no hospitalization. Our pediatric ophthalmologist have extensive experience in treating children with the squint.

GLAUCOMA SERVICES: Glaucoma occurs when the optic nerve gets damaged due to intraocular pressure which can result in vision loss also depending on the severity. Doctors need to be consulted immediately for better chances of recovery. Eye-Q specialist doctors have a wide range of experience in dealing with Glaucoma which requires treatment combined with psychological counselling.

BASIC EYE CARE: Lifestyle changes and increased pollution has led to an increase in Eye problems among the population. General eye care demands regular health check-ups, wearing protective eyeglasses, wash eyes thoroughly with water and rest to eyes after television.



WOMEN EYE CARE: More women than men are at risk for vision loss from cataracts, glaucoma, and macular degeneration. Pregnancy can cause vision changes such as refractive defects, dry eyes, and puffy eyelids. Women should regularly go for health check-ups.

COMPLETE EYE CARE: Comprehensive eye care aims to provide people access to eye care services that meet their needs at every stage of life. This does not only include prevention and treatment but also vision correction. EYE-Q offers comprehensive eye care treatment to patients with eye defects.

ICL SURGERY: Implantable Collamer lens surgery is the procedure in which contact lenses are implanted into the eyes. The ICL lens works with the natural eye lens for correcting refractive errors. The contact lenses are implanted therefore do not required to be removed. EYE-Q hospitals offer ICL surgery to patients for treating vision defects.

6. KEY LEARNINGS OF Healthcare IT

Hospital Management Information system

A Hospital management information system (HMIS) is integrated, comprehensive information system, designed to manage all aspects of the hospital operations, such as clinical, administrative, financial, and ancillary services.

Aim of HMIS.

- To achieve the best possible care and outcome.
- To provide the internal external communication among healthcare providers.
- Provides patient health information when it is needed.
- To keep the patient care data secure.

Electronic Medical records

An electronic medical record (EMR) is digital version of paper chart that contain all of patient's medical history from one practice. An EMR mostly used by providers for diagnosis and treatment. An EMR contains the standard medical and clinical data gathered in one provider's office.

Benefits of EMR

- Track data over time.
- Identify the patient who are due for preventive visits and screening.
- Monitor how patients measure up to certain parameters, such as vaccination and other readings.
- Improve overall quality of care.

Interface

Connecting link between systems with use of standard protocols. It enables different systems for different aspects of services and build on different platforms to communicate with each other.

7. Application EYE-TECH

The TATA Consultancy services Eye-tech for HMIS and EMR is an integrated database that provides a comprehensive set of capabilities. Eye-tech created it to allow healthcare professionals to store, capture, and access patient health information in both acute and ambulatory care setting.

TCS- Eye-Tech Software allows you to:

- Provides real time access to the patient results and clinical information across care disciplines.
- Enable that healthcare organization to meet the NABH requirements for the patient confidentiality.
- Access the patient information securely from wherever and whenever it is most convenient for the care team.

Key Benefits:

- Improve patient care as clinicians can focus on patient's overall health and not just the customer.
- Increase efficiency by placing real-time, updated information with care team in time to make fast and effective decision.
- Increase access to information from multiple venues in the health system.

Modules in Eye-tech:

1. OPD MODULE

SR. No.	Screen Steps
1	How to create OP Slot creation
2	How to Create OP Extra Slot
3	How to open Billing Counter
4	How to take Patient Advance
5	How to Fix Appointment
6	How to do OP Registration
7	How to do Payment and Billing
8	How to do Special Procedure Billing
9	How to raise Credit note & Refund Process
10	How to check Cashier Scroll

2. IPD MODULE

SR. No.	Screen Steps
1	How to Create IP Slot
2	How Create Extra Ip slot
3	How to Schedule Surgery and confirmation
4	How to surgery rescheduling and surgery cancellation
5	How to Allocate the bed
6	How to do Ip registration
7	How to modify existing Ip slot
8	How to inactivate IP
9	how to do service transaction
10	How to do billing, waiver, and payment
11	How to upload Preauthorization form
12	How to do service reversal
13	How to take patient advance
14	How to advance refund

3. PHARMACY MODULE

SR. No.	Screen Steps
1	How to Op Issue
2	How to do discount
3	How to bill and payment
4	How to do Op return
5	How to make Purchase Order
6	How to do GRN
7	How to do return to store
8	How to check Cashier Scroll

4. OTA MODULE

SR. No.	Screen Steps
1	How To do IP request
2	How to Issue IP
3	How to do Ip return
4	How create indent
5	How to accept the indent details
6	How to return to store

5. OPTICAL MODULE

SR. No.	Screen Steps
1	How to take Patient advance
2	How to do advance refund
3	How to create purchase order
4	How to do GRN
5	How to Accept Frame from Depot
6	How to do return to supplier
7	How to give waiver and discount
8	how to do bill & Payment
9	How to do refund & Order Cancellation
10	How to Generate External MRD
11	How to raise indent for frame one to another centre
12	How to issue indent from Pinnacle centre to Centre
13	How to accept Frame from Pinnacle Centre
14	How to check Cashier Scroll

Electronic Medical Records

Basically, EMR is generic term used to describe computer-based patient medical records. For the most part, the development of EMRs is being promoted as a necessary.

Different type of patient data included in EMR system:

- Medical history of patient
- Physical examination
- Diagnosis

- Activities related to clinical work.
- Diagnosis assessment
- Therapeutic efficacy (drugs, investigations, procedures.)
- Data related administration

8. CONCLUSION

The recognition of vast benefits EMR and HMIS systems will provide in healthcare delivery enterprise continues to grow.

Benefits included:

- Fewer errors
 - The provision of most efficient healthcare services.
 - Reduced Utilization
 - Improved ability to manage diseases.
 - Improved health status.
 - Streamlined work processes.
 - More accurate and complete medical records
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