DISSERTATION
IN
APOLLO HOSPITALS

A STUDY ON DOCTORS USER SATISFACTION WITH AN ELECTRONIC MEDICAL RECORDS SYSTEM "DNA MED-MANTRA" IN OUTPATIENT DEPARTMENT

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PG/16/34

HEALTH I.T

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INTRODUCTION OF ORGANIZATION

- THE APOLLO HOSPITALS GROUP WAS STARTED BY DR. PRATHAP C. REDDY IN 1979.
- INDIA'S LARGEST HEALTHCARE CHAIN, AND IS THE SECOND LARGEST HOSPITAL IN DELHI
- APOLLO HOSPITAL HAS BEEN ACCREDITED IN 2005, JULY BY JOINT COMMISSION INTERNATIONAL (JCI) USA AS THE FIRST INTERNATIONALLY ACCREDITED HOSPITAL IN INDIA AND SOUTH ASIA

- THE GROUP STARTED ITS FIRST HOSPITAL AT CHENNAI IN 1983 WITH THE INITIAL BED STRENGTH OF 150
- THE BED STRENGTH TODAY STANDS AT OVER 9000 AND IN APOLLO INDRAPRASTHA IT IS OVER 750
- THIRD SUPER SPECIALTY TERTIARY CARE HOSPITAL SET BY THE APOLLO HOSPITALS GROUP, JOINTLY WITH THE GOVERNMENT OF DELHI, INDIA'S CAPITAL.
- 24 DEPARTMENTS IN APOLLO JASOLA
- THE FIRST SUCCESSFUL PEDIATRIC AND ADULT LIVER TRANSPLANTS IN INDIA WERE PERFORMED AT APOLLO HOSPITALS IN NOVEMBER 1998

ROLE AND REPONSIBILTIES

DESIGNATION-

- WORKING AS A HIMS PROJECT COORDINATOR

RESPONSIBILITIES-

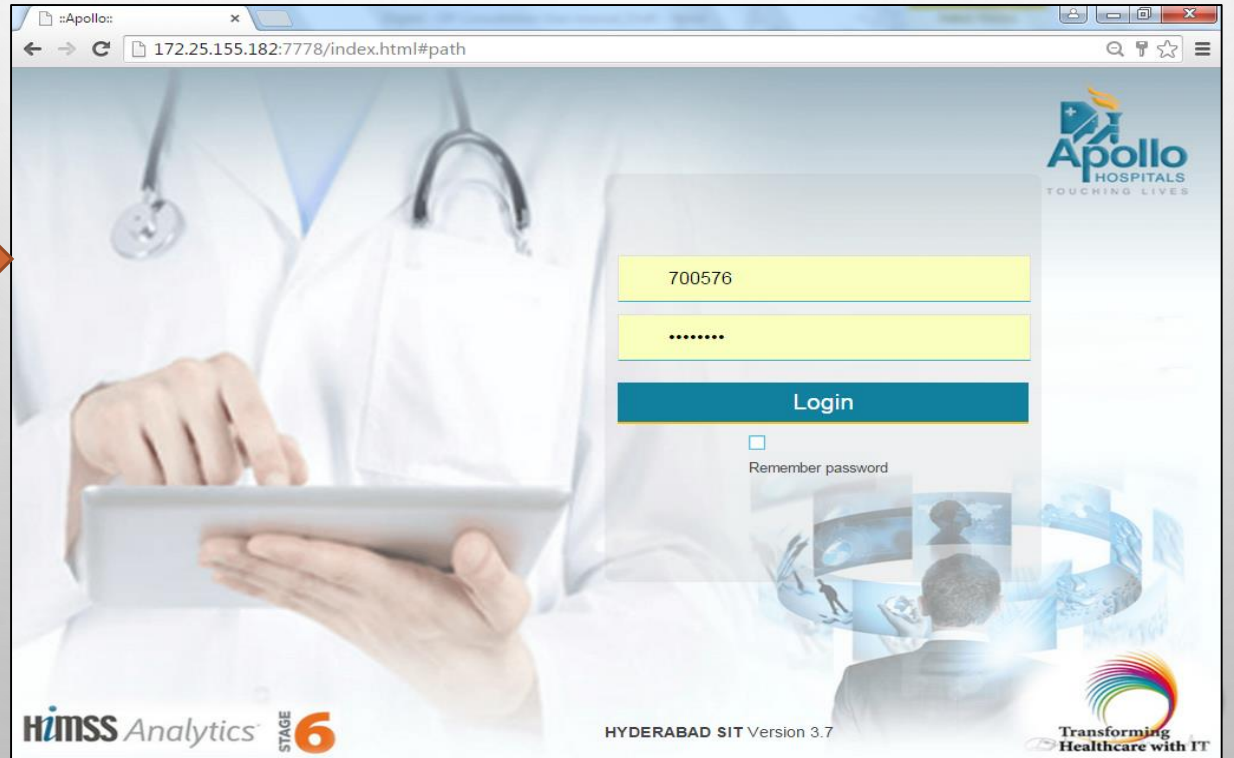
- PROVIDING TRAINING TO ALL THE DOCTORS AND THEIR SECRETARIES
- FOLLOWING UP OF DOCTORS AFTER TRAINING
- SOLVING DOCTOR'S QUERIES REGARDING SOFTWARE FUNCTIONALITY
- PROVIDING RECOMMENDATIONS OF DOCTORS IN SOFTWARE TO SOFTWARE DEVELOPMENT TEAM

OVERVIEW OF MED-MANTRA

- IN 2014,NOV TATA CONSULTANCY SERVICES (TSC) DEVELOPED ONLINE EMR APPLICATION AND NAMED AS “MED-MENTRA”
- ENABLE THE TRACKING OF PATIENT’S RECORDS AT THE DIGITAL PLATFORM.
- MED-MANTRA INCLUDES O.P AND I.P CONSULTATION MODULE.

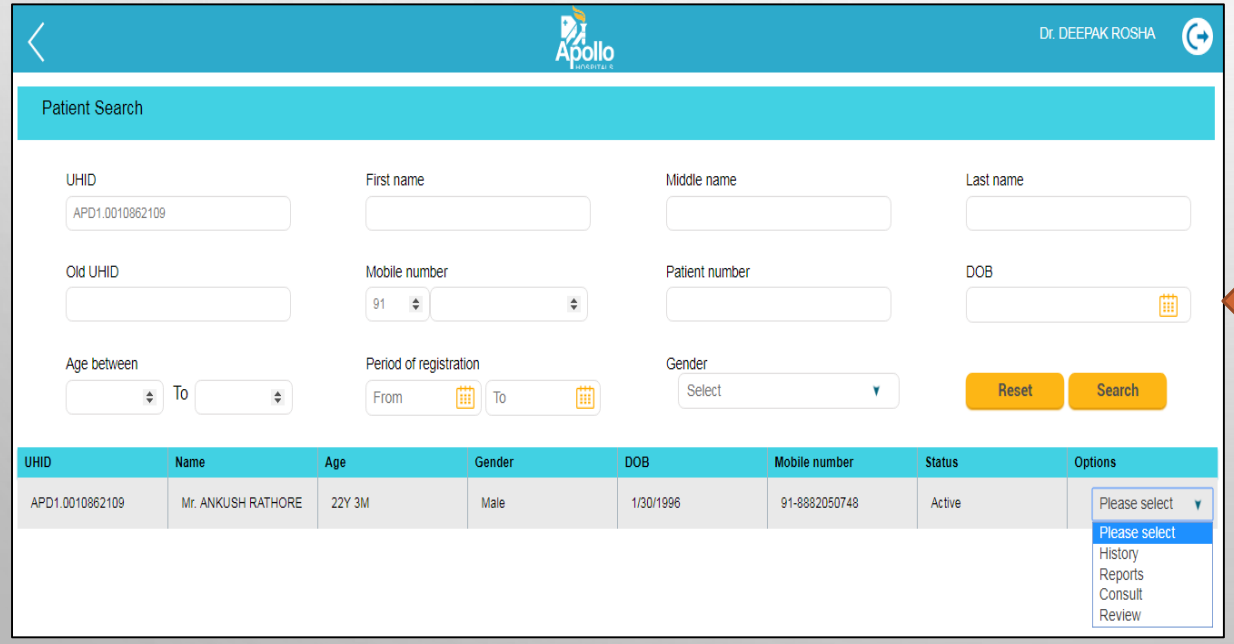
LOGGING INTO

MED-MANTRA



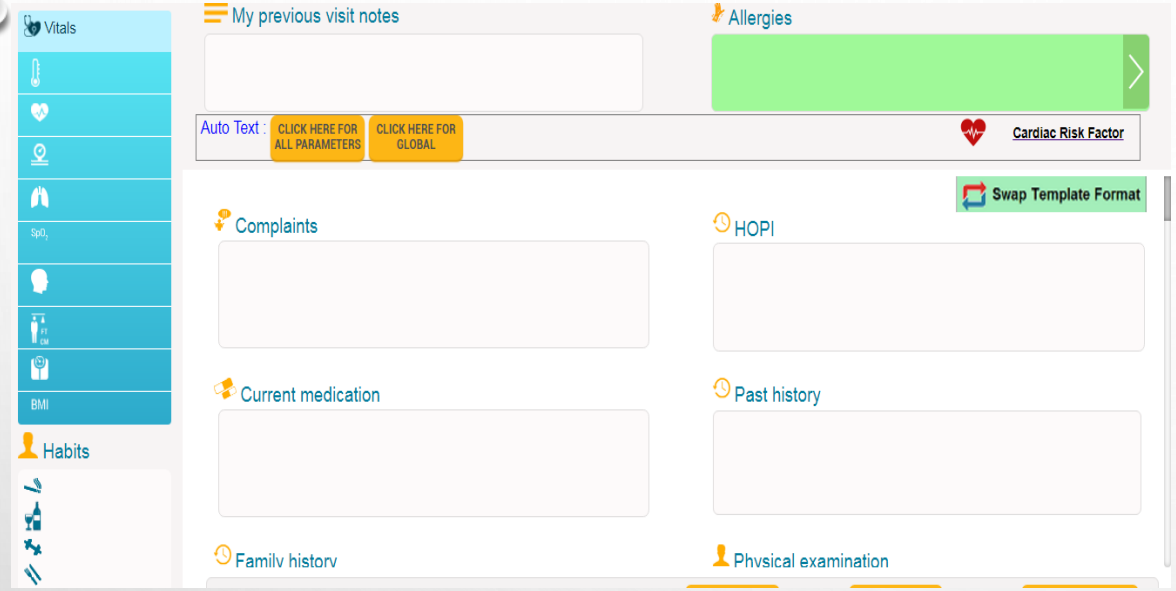
DOCTOR'S

OP DASHBOARD

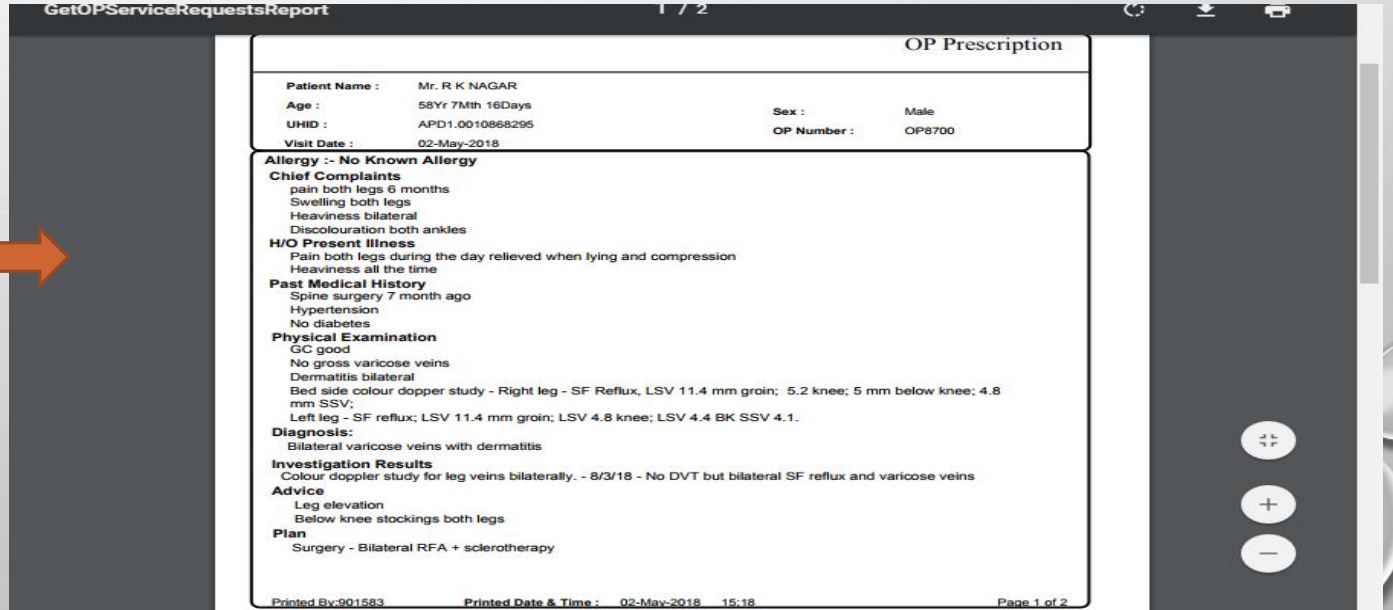


Doctor can search or consult patient by UHID, NAME, MOBILE NUMBER ETC

CREDENTIALS FOR THE E-PRESCRIPTION WRITING



E-PRESCRIPTION



OBJECTIVE & METHODOLOGY

OBJECTIVE

- TO DETERMINE THE SATISFACTION LEVEL OF THE DOCTORS WITH THE ELECTRONIC MEDICAL RECORDS SYSTEM NAMED MED-MANTRA AND TO SUBMIT RECOMMENDATIONS TO ADDRESS THE LIMITATIONS.

METHODOLOGY

- **STUDY LOCATION:** OUT PATIENT DEPARTMENT (OPD) OF INDRAPRASTHA APOLLO HOSPITALS.
- **STUDY POPULATION:** DOCTOR IN OUT PATIENT DEPARTMENT (OPD) OF INDRAPRASTHA APOLLO HOSPITALS.
- **STUDY DESIGN:** CROSS-SECTIONAL (DESCRIPTIVE STUDY).
- **STUDY DURATION:** 3 MONTHS.
- **SAMPLING TECHNIQUE:** PURPOSIVE SAMPLING
- **SAMPLE SIZE:** 100 DOCTORS

- **DATA COLLECTION TOOL:**

➢ CHECKLIST – ON THE BASIS OF OBSERVATION AND INTERVIEW WITH OPD CONSULTANTS AND STAFF

- **DATA COLLECTION METHOD:**

➢ REVIEWING OF MED-MANTRA MANUAL, POLICES, DIGITAL NETWORK APOLLO (DNA).

➢ INTERACTIONS WITH HOSPITAL'S STAFF AND CONSULTANTS.

- **SELECTION CRITERIA –**

➢ **INCLUSION CRITERIA: -**

OPD PHYSICIANS AND CONSULTANTS

➢ **EXCLUSION CRITERIA: -**

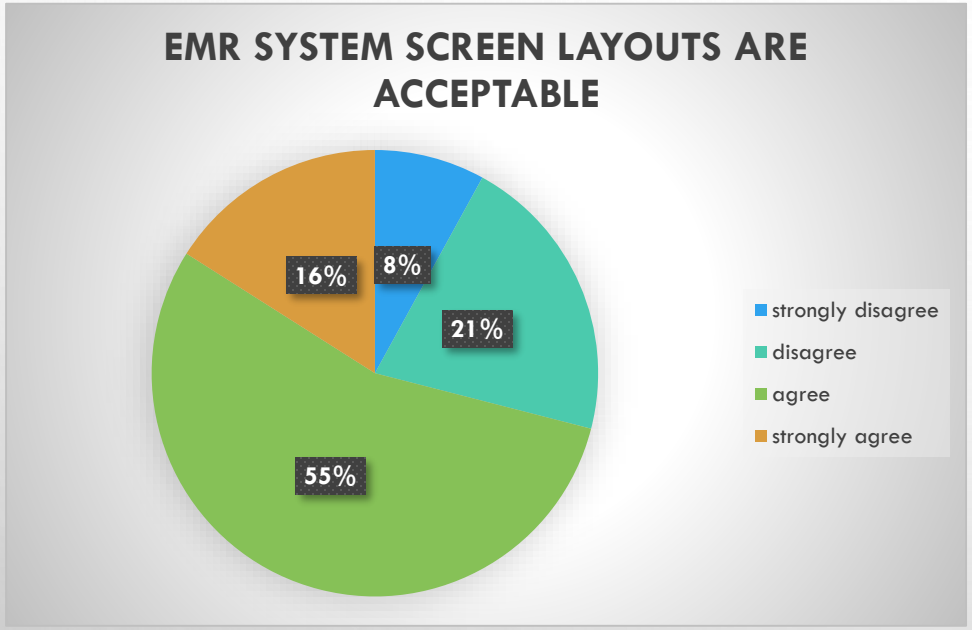
IPD DOCTORS

VISITING CONSULTANTS

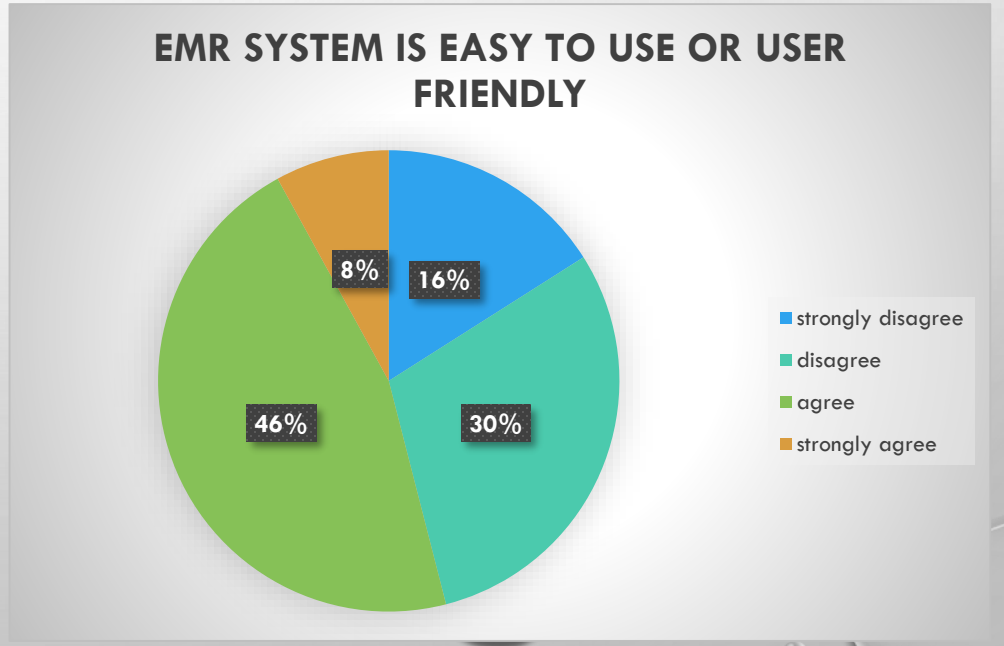
NURSES

RESULTS AND DATA INTERPRETATION

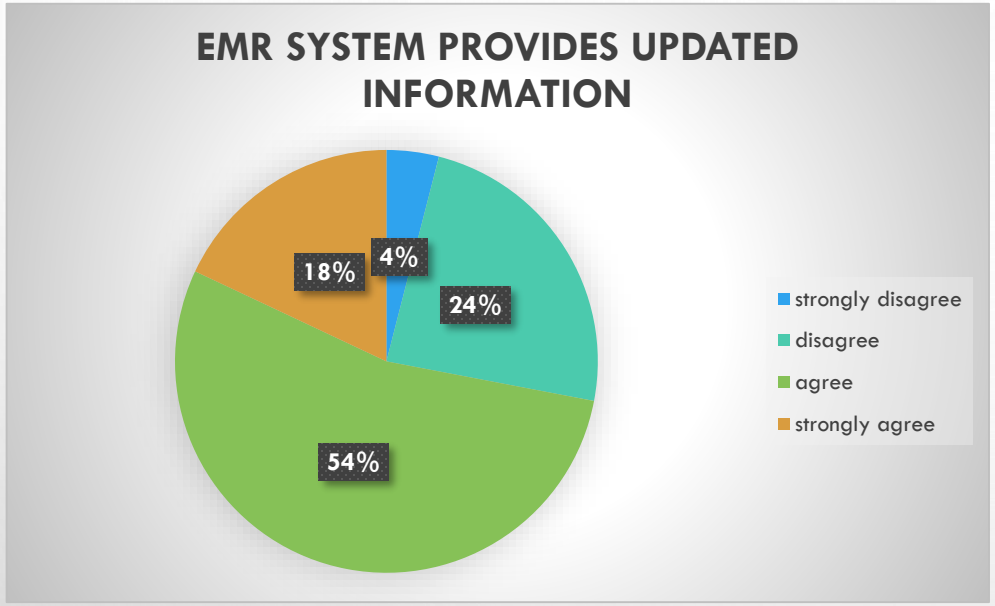
1. ACCEPTABILITY OF EMR SYSTEM LAYOUTS BY THE OPD DOCTORS ?



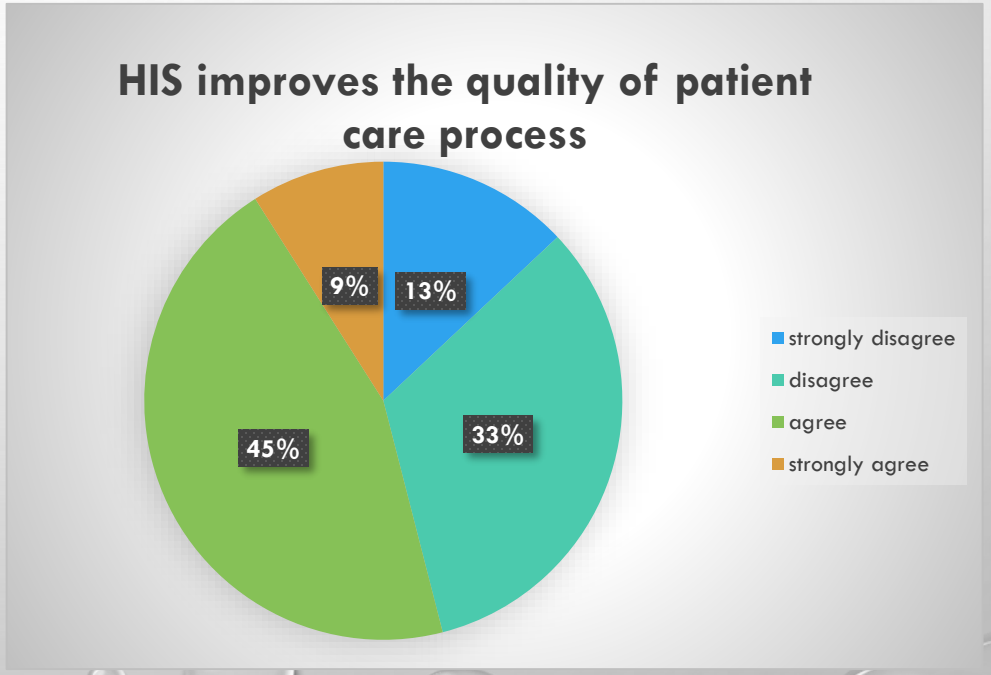
2. EMR SYSTEM IS EASY TO USE OR USER FRIENDLY?



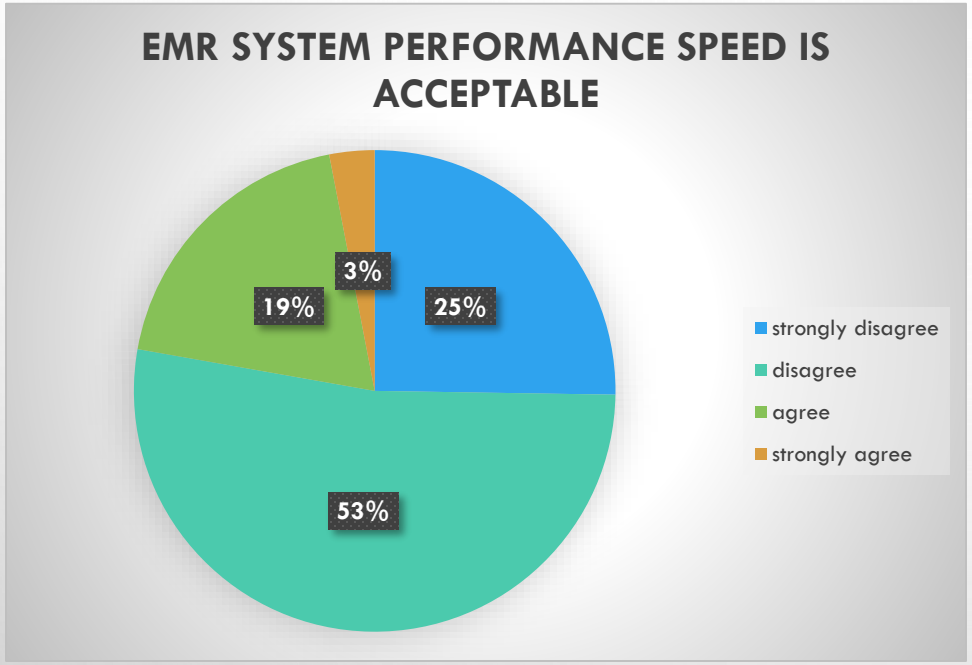
3. EMR SYSTEM PROVIDES UPDATED INFORMATION ?



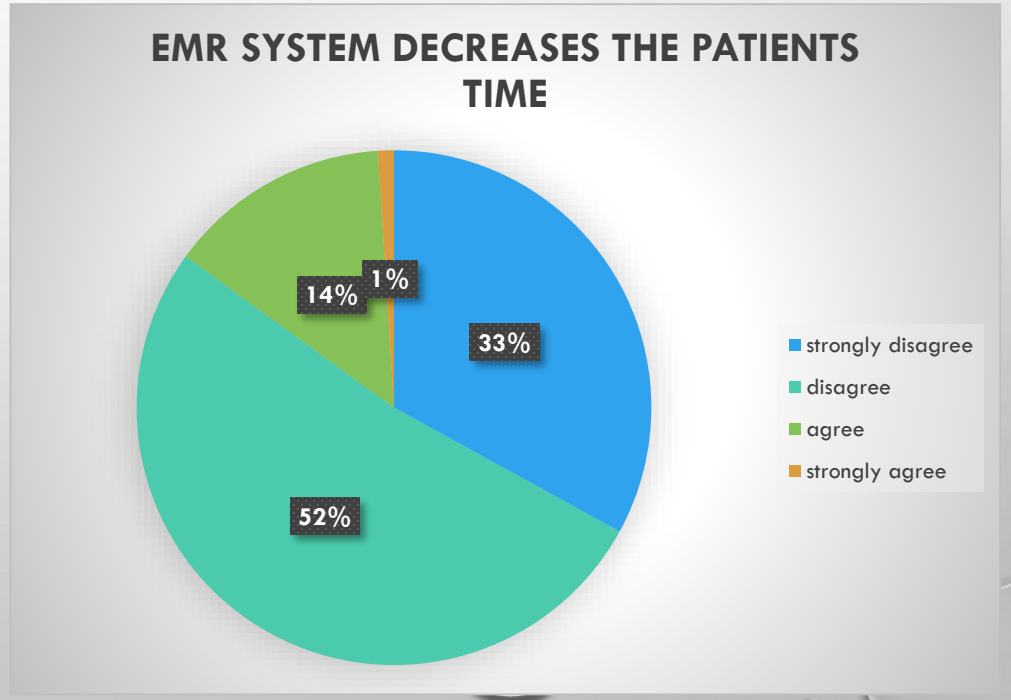
4. HIS IMPROVES THE QUALITY OF PATIENT CARE PROCESS ?



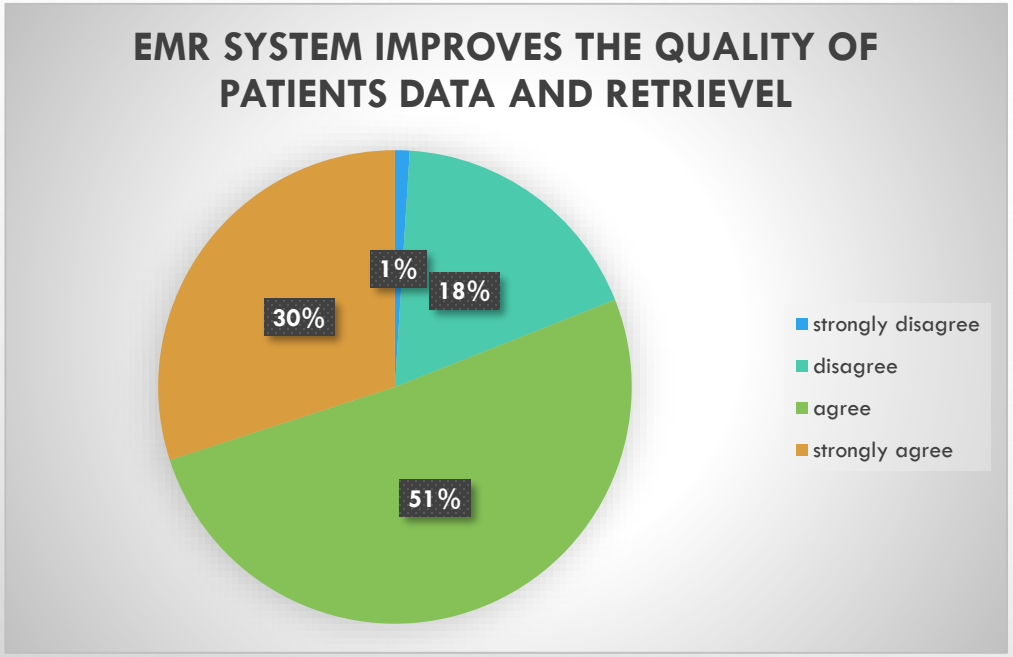
5. EMR SYSTEM PERFORMANCE SPEED IS ACCEPTABLE ?



6. EMR SYSTEM DECREASES THE TIME SPENT ON PATIENT ?

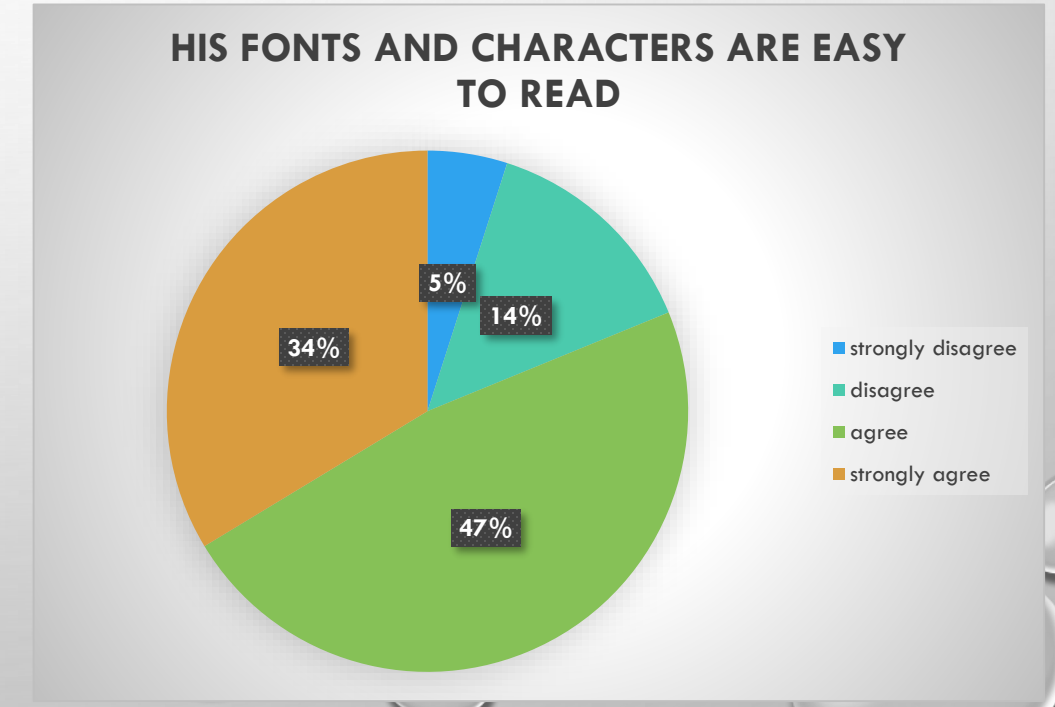


7. EMR SYSTEM IMPROVES THE QUALITY OF PATIENT DATA AND RETRIEVAL ?

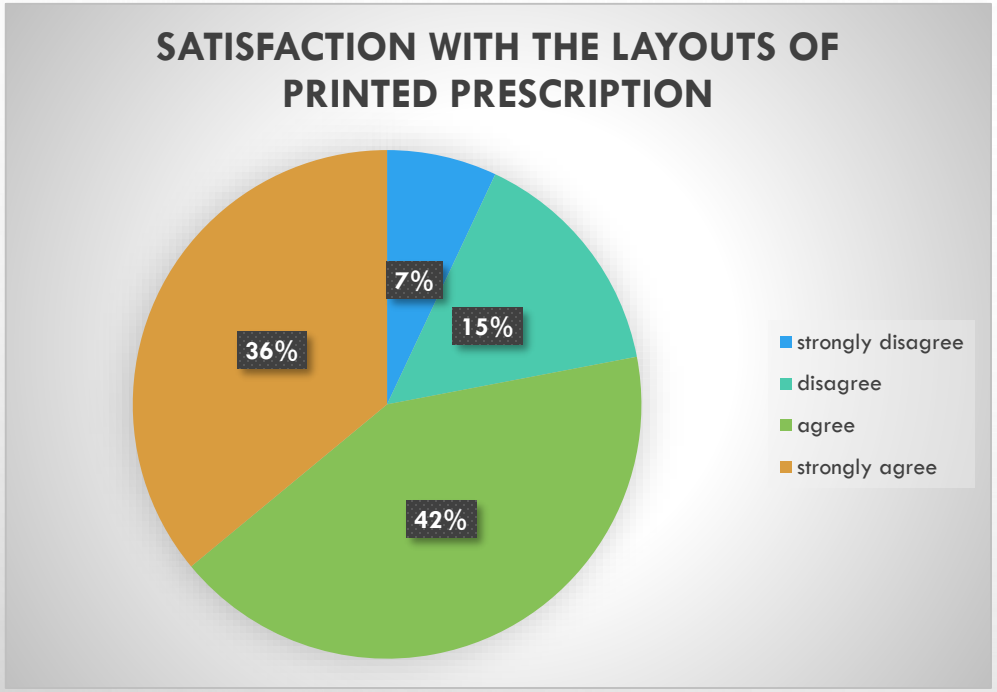


Figur

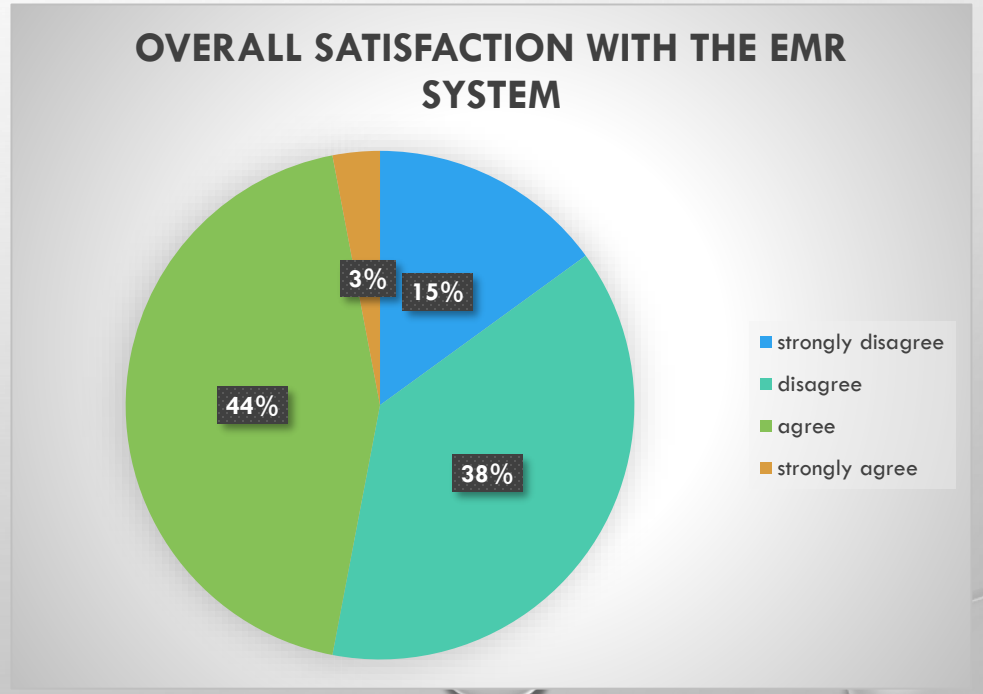
8. HIS FONTS AND CHARACTERS ARE EASY TO READ ?



9. SATISFACTION WITH THE LAYOUTS OF PRINTED PRESCRIPTION ?

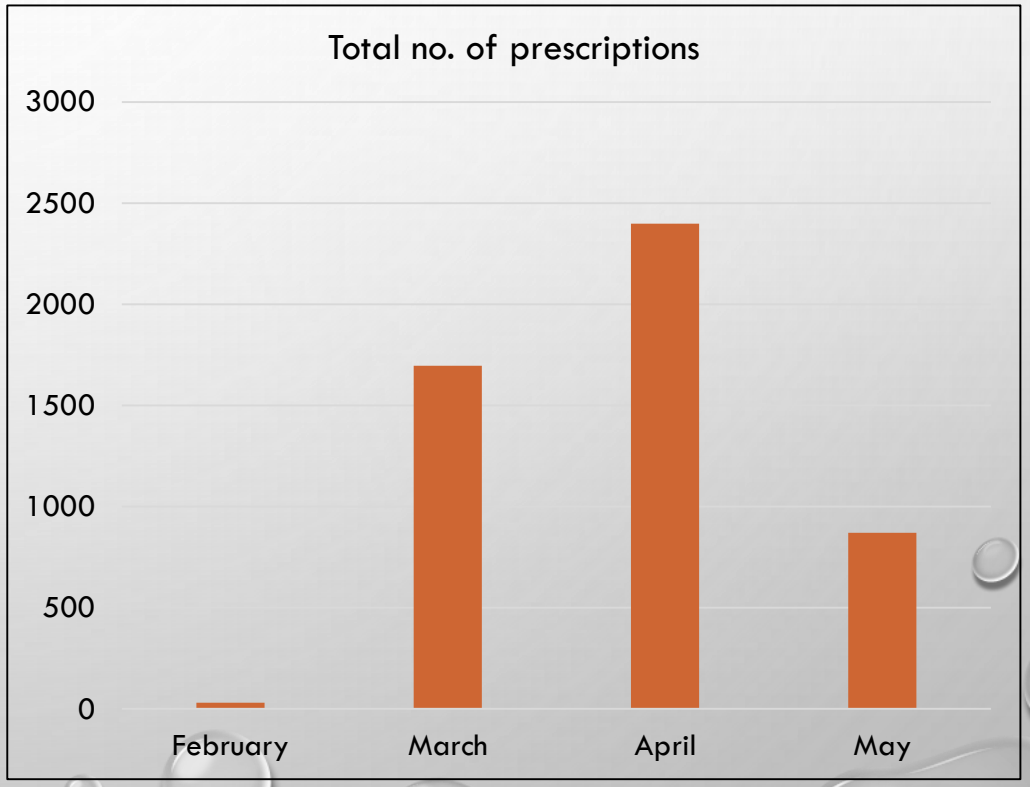


10. 0VERALL SATISFACTION WITH THE EMR SYSTEM



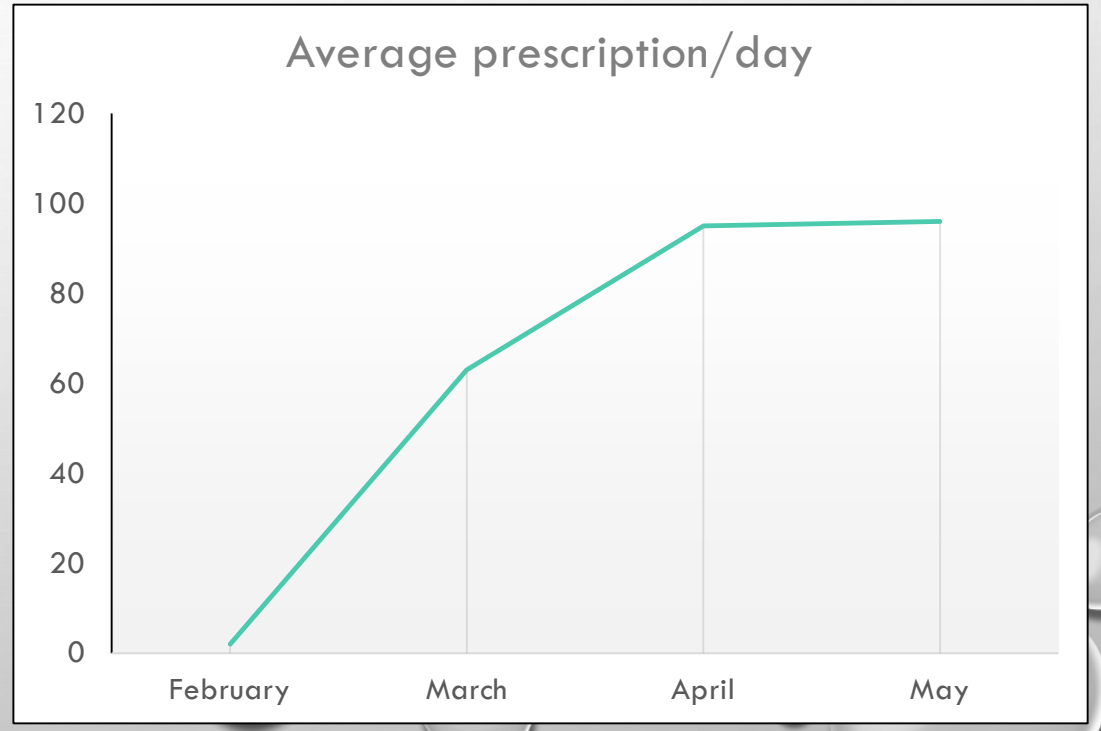
- DATA IS COLLECTED FROM 10TH FEBRUARY TO 10TH MAY. TOTAL NUMBER OF DOCTORS ON BOARDED TILL THE GIVEN TIME PERIOD ARE 91

S.No	Month	Total no. of days	Total no. of doctors onboarded	Total no. of prescriptions
1	February	17	19	31
2	March	27	34	1696
3	April	25	35	2399
4	May	9	3	870



- NUMBER OF AVERAGE PRESCRIPTIONS PRINTED BY DOCTORS PER DAY IN EACH MONTH

S.No	Month	Average prescription/day
1	February	2
2	March	63
3	April	95
4	May	96



GAP ANALYSIS

➢ **MAJOR CHALLENGES IN MED-MANTRA**

- ONLY CREDIT PATIENTS WERE REFLECTING ON DASHBOARD.
- NETWORK CONNECTIVITY ISSUE
- IN 'ATTACHMENT' PARAMETER OF PRESCRIPTION, ONLY FILE FORMAT SUCH AS 'JPEG' WAS GIVEN.
- THE OVERALL PROCESS OF TYPING E-PRESCRIPTION WAS VERY LENGTHY AND TIME CONSUMING.

➢ **CHALLENGES FACED BY DOCTORS**

- DOCTORS COULDN'T USE EMR WHENEVER THERE WAS HEAVY PATIENT FLOW.
- NOT FEELING COMFORTABLE IN TYPING LENGTHY PRESCRIPTION
- IT WAS HAMPERING THE LEVEL OF THEIR PATIENT SATISFACTION.

RECOMMENDATIONS

- THE STATUS OF CASH PATIENTS SHOULD REFLECT ON OP DASHBOARD.
- THE PROCESS OF TYPING USERNAME SHOULD BE AUTOMATICALLY SET AS A DEFAULT RATHER BY ENTERING WHOLE SET
- FILE FORMAT SUCH AS ".PDF" SHOULD BE ENABLED AT ATTACHMENT OPTION TOWARDS UPLOADING OF FILE IN E-PRESCRIPTION
- CONNECTIVITY ISSUES NEED TO BE IMPROVED
- UNNECESSARY STEPS IN MED-MANTRA SHOULD BE REMOVED FROM PATIENT LANDING SCREEN.

Thank
you!!