**Requirements:**

1. OP Query for the month
2. IP Query for the month
3. All applicable doctors list
4. New Query to find other Doctor in same encounter paediatric (Swati)
5. Data received from Reliance Hospital
6. Transplant Data from Rekha Barot and Team
7. New Query to find other doctors in the same encounter (Swati)
8. EHC Query
9. New Query, GST on service codes (Swati)
10. New Query, to find plastic surgeons from EHIS (Swati)
11. Query of Bill for Plastic Surgery
12. Query of Patient Package
13. Admissions Query
14. Doctor Visit Query
15. Bed Charges Query
16. Time office excel sheet specifying on duty or leave
17. New Query to find Public Holidays and Sundays from HIS (Swati)
18. Doctors CTC File \*
19. Discharge Query
20. Excluding Doctors List
21. New Query for bed charges bed tariff (different for Indian and Foreigner) (Swati)
22. New Query to retrieve Bed Names (Swati)
23. Pre-Discharge Query for Cancelled
24. Pre-Discharge Query for Online

**Application Process:**

**Step 1: Making the main Dataframe.**

1. Run OP Query for the month (requirement number 1) and IP Query for the month (requirement number 2)
2. Add a column name source and add the source we are getting the data from
3. Concatanate both dataframes into one main dataframe
4. Filter and remove all rows where billing class is emergency charges
5. Filter out all applicable doctors from the main dataframe delete the rest.
6. Concatenate RH Data update the source column.
7. Add Doctor Group Column from Doctor list.
8. Add a ref group column. If CNIP in service code, then row in column ref group should be IP Consult else Procedure.

**Step 2: Transplant Split**

1. Sum of transplant doctor share and divide among three doctors as follows
   1. Urology
      1. Dr. Sanjay Pandey – equal (33.33%)
      2. Dr. Attar Muhammed Ismail – equal (33.33%)
      3. Dr. Bejoy Abrahaham – equal (33.33%)
   2. Cardiology
      1. Dr. Nandkishore Kapadia – equal (50%)
      2. Dr. Vidyadhar Lad – equal (50%)
   3. Liver
      1. DR. SOMNATH CHATTOPADHYAY – 40%
      2. DR. KANCHAN MOTWANI – 30 %
      3. DR. VINAYAK GANGADHAR NIKAM - 30%

**Step 3: SRS.**

1. Filter SRS in service description.
2. Filter Episode ID and find other Doctor from Neurology and other from Radiation Department.
3. SRS in main Dataframe will change to zero and then distributed equally among the two doctors.

**Step 4: Paediatric.**

1. Paediatric fee filter in ser\_description search episode ID
2. Run new Query to find other Doctor in same encounter paediatric (requirement no. 4).
3. Replace Doctor name with new Doctor name
4. Doctor Share will be zero
5. Add comment in the comment column as changed from old doctor name to new doctor name.

**Step 5: EHC.**

1. If patient is an EHC patient, then Doctor Share will be zero
2. Run EHC Query (Requirement number 8)
3. Each doctor in query will given share of Rs 400 per patient

**Step 6: Reliance Hospital Share.**

1. In RH Data Increase All doctor share by 20% (as they get only 80%, we need to increase 80% to 100%).  
   Formula value / 80 x 100
2. Match RH service code with our service code in the main dataframe.
3. Some values might not be found (Grade 1 to 7).
4. If Service is Dressing, then Doctor Share will be zero
5. If 2D Echo, then Doctor Share will be zero
6. If Grade or Surgeon Fees in Service Description, then copy new amount to main dataframe
7. Any other Service Description remains then on those row/entry doctor share will be zero

**Step 7: Add a Column Rev\_Stream**

1. Add a new column named as rev\_stream
2. If Doctor Share greater than 1 then value in rev\_stream will be 1
3. Else if Doctor Share less than 1 then value in rev\_stream will be -1

**Step 8: Deductions Based on GST on Cosmetic Services**

1. Run GST on Selected Service (Requirement No 9.)
2. All the service matched with GST dataframe, means GST is applicable.
3. Reduce the doctor share by 18%

Formula: value /1.18 – doctor\_share

(All this mostly applicable for Cosmetic Service)

**Step 9: GST on Plastic Surgeons**

1. Run Query, to find Plastic Surgeons from EHIS (Requirement No 10).
2. Filter Plastic Surgeons (Kazi Ahmed, Amol Ghalme) using UHID and Episode.
3. Run the Query of Bill for Plastic Surgery (Requirement No 11).
4. This Query has records of detail bill of the said doctors.
5. We check if any services were charged as cosmetic GST.
6. Check for Surgeon Fees.
7. If any data in tat column, then copy episode ID and search in the main dataframe.
8. Then all matching episode ids in the main dataframe, we deduct 18% from the doctor’s share

Formula value /1.18

**Step 10: Check Negative Entry**

1. Each Negative entry in the main dataframe should have a positive entry.
2. If we do not find a positive entry, then we check previous in dataframes of past two months on the basis of UHID and Doctor Name.
3. Other condition, If we find any other Doctor with same positive amount with same service code then we change Doctor with minus entry to positive Doctor name.

**Step 11: Patient Package based Deductions**

1. Filter ser\_code and PRSN
2. Run Query for patient package (Requirement No 12).
3. Match Data with main dataframe using episode id
4. All the episodes we find which ID has package etc, then we replace those specific doctor’s share on those matched doctor share and replace according to the below mentioned percentage.

GIPS = 5.5%

ONGC = 10%

NACIL = 10%

SBI = 7.5%

**Step 12: Check any missed visit charges by doctors.**

1. Doctors are supposed to charge for every visit except for below mentioned parameters:
   1. Public Holidays
   2. Sundays
   3. Doctors were on Leave
   4. Doctors on Duty elsewhere.
   5. Some Doctors are excluded from this calculation.
2. Prerequisites
   1. Check in Time office excel sheet specifying on duty or leave of Doctors (Requirement No 16)
   2. If Doctor has taken more than one leave then add new rows for each of the leave, each indicating distinct date.
   3. Run Bed Charges Query (Requirement No. 15).
   4. Run Admissions Query (Requirement No. 13).
3. Late Admission
   1. Match Bed Charges and Admission Query using Episode ID and Service Date of Bed Charges Dataframe with Episode and ID and Admission Date in Admission Query Dataframe
   2. Add two columns, Date and Time in Bed Charges Query (Requirement No. 15).
   3. Any Patient who was admitted after 18:30:00 add a remark to the remark Column as “Late Admission”.
4. Holidays
   1. Run Query to find Public Holidays and Sundays from HIS (Requirement No. 17).
   2. Filter Service Date of Bed Charges with Public Holidays and Sundays all found days we have to add remark in Remark Column as “Holiday”.
5. Doctors on Duty, Leave & Loss of Pay
   1. Find the PR number from Time Office Dataframe by matching Doctor Name and Bed Charges Query and CTC file.
   2. Add a PR Number Column in Bed Charges Dataframe
   3. Add PR Number to PR Number Column on Bed Charges Dataframe.
   4. Match PR Number in Bed Charges Dataframe against Time Office Excel Dataframe using Date.
   5. All dates Doctors are no leave, we write “Doctor on Leave” in the Remark Column in Bed Charges Dataframe.
6. Check Visit Posted By Doctors
   1. Run Doctor Visit Query (Requirement No. 14)
   2. Match Episode and Service with Doctor Visit Query and \_\_\_\_\_\_\_
   3. Check whether doctor has posted visit charges by matching patient.
      1. Add a column Visit Posted to display charges
      2. Add a column Remark Column as “Visit Posted”
7. Add a Country Column in Bed Charges Dataframe
   1. Run Admissions Query (Requirement No. 13)
   2. Add a Column in Bed Charges Dataframe as Patient’s Country Admission for visit for Visit not Posted.
   3. Match by using UHID or Episode ID in both dataframe, Bed Charges and Admission Dataframe.
   4. Add Countries from Admission Query and paste to Patient’s Country column.
8. Deletion of Duplicate Encounter
   1. If encounter is duplicated more then once in a single day, then delete all Duplicates row having same service date and containing following conditions:
      1. If Encounter ID is double
      2. If Service Description is same
      3. If above conditions are met, then remove row having lowest bed charges
9. Bed Charges as per Patient Country
   1. Run Query for bed charges bed tariff (different for Indian and Foreigner) (Requirement No. 21)
   2. In HIS bed charges are defined as per bed description
   3. In this step, Service Description is the key.
   4. Use Service Description and Patient Country from Admission Query (Requirement No. 13) which we ran earlier, to match and insert country to the country column in Bed Charges Dataframe.
   5. Add Bed Charges to visit not posted column in Bed Charges Dataframe.
   6. If the Bed Charges are less, then zero then run Query for bed charges bed tariff (different for Indian and Foreigner) (Requirements No. 21) and remove anything else also remove \_\_\_\_\_\_\_
   7. Create a failsafe if patient doesn’t have a country in query result.
10. Pre-discharge Cancelled
    1. Run Pre-Discharge Query Bed charges (Requirements No. 23).
    2. In Bed Charges dataframe add column Same Day Adm
    3. Add column in Bed Charges Dataframe as Remark if not exist.
    4. Using Episode ID from Bed Charges Dataframe match with Pre-discharge Dataframe and get First Discharge request date and add to Bed Charges Dataframe in Same Day Adm column
    5. Check Same Day Adm date with ser\_date.
    6. If pre-discharge date grater, then ser\_date then remove amount from column visit not poste and add comment “Patient physically discharged but bill not closed”.
11. Pre-discharge Online
    1. Run Pre -Discharge Query for Online (Requirements No. 24).
    2. Using Episode ID of Bed Charges Dataframe match with Episode ID of Pre-discharge Dataframe and get Pre-discharge date and add to Bed Charge dataframe