

Registration Management

Table of Contents

| | | |
|-------|--|----|
| 1. | Introduction | 4 |
| 1.1. | Purpose | 4 |
| 2. | Subsystem Description | 4 |
| 2.1 | Overview | 4 |
| 2.2 | Objectives..... | 4 |
| 3. | Specific Requirements | 5 |
| 3.1 | Register Internal Patient | 5 |
| 3.1.1 | Main Flow - Registration | 5 |
| 3.1.2 | Screen Layout | 7 |
| 3.1.3 | Screen Elements | 8 |
| 3.2 | Register Newborn Patient..... | 13 |
| 3.2.1 | Description | 13 |
| 3.2.2 | Main Flow - Newborn Registration | 13 |
| 3.2.3 | Business Rules | 13 |
| 3.2.4 | Screen Layout | 14 |
| 3.2.5 | Screen Elements: | 14 |
| 3.3 | Merge Duplicate Registrations..... | 15 |
| 3.3.1 | Description | 15 |
| 3.3.2 | Main Flow | 16 |
| 3.3.3 | Post Conditions..... | 16 |
| 3.3.4 | Screen Layout | 16 |
| 3.3.5 | Screen Elements | 16 |
| 3.4 | Search Patient | 17 |
| 3.4.1 | Description | 17 |
| 3.4.2 | Preconditions..... | 18 |
| 3.4.3 | Main Flow | 18 |
| 3.4.4 | Post Conditions..... | 18 |
| 3.4.5 | Screen Layout | 18 |
| 3.4.6 | Screen Elements | 19 |
| 3.5 | Reports..... | 20 |
| 3.5.1 | Registration Count Report..... | 20 |
| 3.6 | Print / Display Report..... | 20 |
| 3.6.1 | Description | 20 |
| 3.6.2 | Preconditions..... | 21 |
| 3.6.3 | Main Flow | 21 |
| 4. | Interfaces..... | 24 |
| 4.1. | Hardware Interfaces | 24 |
| 4.2. | Software Interfaces..... | 24 |
| 5. | Annexure | 24 |
| 5.1. | Report printing format..... | 24 |

Document Control

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1. Introduction

1.1. Purpose

This document is intended to form a basis for the development of **Registration Management** Sub system.

2. Subsystem Description

2.1 Overview

- Patient needs to be registered with the Hospital for availing Hospital Services.
- It generates unique identification number for the patient during the Registration Process.
- It allows user to register with various types in to hospital.
- Patient Registration types are configurable through the Registration Type Master.

2.2 Objectives

- Store and save all records of Patient to the Medical Record number/Unique Patient Identification Number.
- Generate Bar code labels for Patient's medical folder
- Maintain Centralized Patient Information to access Patient Information across the Hospital Organization.

3. Specific Requirements

3.1 Register Internal Patient

3.1.1 Main Flow - Registration

- 3.1.1.1 User selects Registration Menu Option from Main Menu.
- 3.1.1.2 System displays the Registration Form containing mandatory and optional fields as configured in Registration Type Master.
- 3.1.1.3 User selects the registration type, by default the registration type is set to 'Normal', the user can change it.
- 3.1.1.4 User selects the location at which the patient is getting registered in case of a hospital with multiple locations.
- 3.1.1.5 User selects title from the Title List. Based on title selection Gender field should automatically change. In case gender not define by title user manually selects. Examples like Mr. should be Male; Miss should be Female and for Dr. can't define
- 3.1.1.6 User enters First Name and Last Name.
- 3.1.1.7 System displays Alias Name field based on configuration in Registration Master.
- 3.1.1.8 User enters Alias Name in case Patient is VIP E.g. Politician, Celebrity.
- 3.1.1.9 **System displays or prints alias name in all the screens and reports for VIP Patient. System displays Original name on Final Bill and Diagnostics reports only.**
- 3.1.1.10 User selects Date and Time of Birth. On selection of Date of Birth, System automatically computes Age and Age Group and display.
- 3.1.1.11 If user enters the Age and Age Units, System computes and displays Date of Birth automatically.
- 3.1.1.12 System Displays Address as Detailed fields or Multi Line field format based on Hospital level configuration.
- 3.1.1.13 User selects the Country, State and City. On Country selection States should be filter, on State selection cities should be filter from masters.
- 3.1.1.14 User selects Nationality and if user is foreign patient, selects Foreign Patient.
- 3.1.1.15 User enters Email, Residence and Mobile Phone number.
- 3.1.1.16 User selects Send Email, Send SMS, Marital Status, Patient Occupation, Ethnicity and Religion.
- 3.1.1.17 User selects Id type (Passport, Pan Card etc.) and enters ID Number, System provides an option to select multiple ID types and enter details of it.
- 3.1.1.18 User selects Blood Group.
- 3.1.1.19 System provides an option to select **Hospital Confirmed**, if Blood group is confirmed by Hospital Laboratory. Default it's unselected.
- 3.1.1.20 **If the patient is staff or staff dependent system provides a staff or Staff dependent entitlement options.**
- 3.1.1.21 **If the patient is staff or staff dependent, user enters Employee Number to identify the patient.**
- 3.1.1.22 If patient is referred by any one system allows to capture the referred by details. System provides user defined reference type option.
- 3.1.1.23 User enters the KIN details if required.
- 3.1.1.24 System allows uploading photograph or capturing photo if camera available.
- 3.1.1.25 User selects the payment type as self-paying or sponsored.

Requirements For Registration Management

- 3.1.1.26 If user selects payment type as Sponsored, System allows to entering the respective details.
- 3.1.1.27 User submits for Registration.
- 3.1.1.28 System generates a Unique Medical Record Number (MR No.).
- 3.1.1.29 System provides option to print/save filled registration form.
- 3.1.1.30 System provides option to print / save the registration details (Registration Number, Name, address etc. with Barcode label) as configured in Registration master.
- 3.1.1.31 System sends SMS to the patient within 5 seconds from the MR No. generation in configured SMS format.
- 3.1.1.32 System provides an option to Print or Generate Patient Bar-coded/RFID ID card as per configured fields.
- 3.1.1.33 System provides an option to Print Bar code labels for stick on Medical Record Folder as per configuration.

3.1.2 Screen Layout

| Personal Details | Communication | Referral | Kin details | Others |
|---|----------------------|--|----------------------|--------|
| Location | | Registration Type | | |
| <input type="text"/> | | <input type="text"/> | | |
| Salutation | First Name | Middle Name | Last Name | |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | |
| Gender | DOB | Patient age unit years | Patient age group | |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | |
| Residence number | Mobile Number | E-Mail | Photo | |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | | |
| Nationality | Ethnicity | <input type="checkbox"/> Foreign Patient | | |
| <input type="text"/> | <input type="text"/> | <input type="checkbox"/> Foreign Patient | | |
| VIP Category | Patient Alias Name | Patient Type | | |
| <input type="checkbox"/> VIP <input type="text"/> | <input type="text"/> | <input type="text"/> | | |
| <input type="checkbox"/> Family Head Indicator | Link Reg. No. | <input type="checkbox"/> Blacklist | Blacklist Reason | |
| <input type="checkbox"/> Family Head Indicator | <input type="text"/> | <input type="checkbox"/> Blacklist | <input type="text"/> | |
| <input type="checkbox"/> Send SMS | | <input type="checkbox"/> Send E-mail | | |
| | | Save | | Clear |

| Personal Details | Communication | Referral | Kin details | Others |
|--|---------------|--------------------------------------|-------------|--------|
| Present | | Country | | |
| <input type="text"/> | | <input type="text"/> | | |
| Detail address | | State | | |
| <input type="text"/> | | <input type="text"/> | | |
| <input type="checkbox"/> Same as Present | | City | | |
| | | <input type="text"/> | | |
| Permanent | | Country | | |
| <input type="text"/> | | <input type="text"/> | | |
| Detail address | | State | | |
| <input type="text"/> | | <input type="text"/> | | |
| <input type="checkbox"/> Same as Permanent | | City | | |
| | | <input type="text"/> | | |
| | | Zip Code | | |
| | | <input type="text"/> | | |
| <input type="checkbox"/> Send SMS | | <input type="checkbox"/> Send E-mail | | |
| | | Save | | Clear |

| Personal Details | Communication | Referral | Kin details | Others |
|-----------------------------------|---------------|--------------------------------------|-------------|--------|
| Referred Type | | Name of referred by | | |
| <input type="text"/> | | <input type="text"/> | | |
| Country | | State | | |
| <input type="text"/> | | <input type="text"/> | | |
| City | | Zip Code | | |
| <input type="text"/> | | <input type="text"/> | | |
| Telephone no. of referred by | | Office no. of referred by | | |
| <input type="text"/> | | <input type="text"/> | | |
| | | Residence no. of referred by | | |
| | | <input type="text"/> | | |
| | | Mobile no. of referred by | | |
| | | <input type="text"/> | | |
| Detail address | | | | |
| <input type="text"/> | | | | |
| <input type="checkbox"/> Send SMS | | <input type="checkbox"/> Send E-mail | | |
| | | Save | | Clear |

| Personal Details | Communication | Referral | Kin details | Others |
|--|---------------|-------------------|-------------|---------------------------|
| Name of Kin | | Gender of Kin | | Relationship with patient |
| Telephone Number of Kin | | Mobile no. of Kin | | Email id of Kin |
| <input type="checkbox"/> Send SMS <input type="checkbox"/> Send E-mail | | | | |
| <input type="button" value="Save"/> <input type="button" value="Clear"/> | | | | |

| Personal Details | Communication | Referral | Kin details | Others |
|--|---------------|-----------------------|-------------|------------------------|
| Religion | | Marital Status | | Blood group of patient |
| Hospital Confirmed | | Occupation of patient | | Income of patient |
| Office number | | ID type | | ID number |
| <input type="checkbox"/> Send SMS <input type="checkbox"/> Send E-mail | | | | |
| <input type="button" value="Save"/> <input type="button" value="Clear"/> | | | | |

3.1.3 Screen Elements

| S. No | Field Name | O/M * | Description/explanation/ formula | Display / Select / Enter | Source (Input) | Remarks (incl. validation) |
|-------------------------|-------------------|-------|---|--------------------------|--------------------------|--|
| Personal Details | | | | | | |
| 1. | Location | M | Self explanatory, | Display | Location master | location where registration of patient is done. |
| 2. | Registration Type | M | Displays patient registration types as icons. | Select | Registration Type Master | External and internal as screen icon From Registration type master |
| 3. | Salutation | M | For e.g. Mr., Ms, Master Mrs. Dr. Brig. | Select | Title master | Nil |
| 4. | Last Name | M | Self explanatory | Enter | Nil | Nil |
| 5. | Middle Name | O | Self explanatory | Enter | Nil | Nil |
| 6. | First Name | M | Self explanatory | Enter | Nil. | Nil. |
| 7. | VIP | O | By default un checked | Select | Nil | Nil |
| 8. | Alias Name | O | Pet name of patient | Enter | Nil | This is a mandatory field if the patient is VIP. |
| 9. | Date of Birth | M | Date of Birth (self explanatory) | Select | DOB calendar master | Nil. |
| 10. | Age | NA | Self explanatory | Display | Current patient age | Validate as per the DOB and display the patient age if DOB is selected |

| S. No | Field Name | O/M * | Description/explanation/ formula | Display / Select / Enter | Source (Input) | Remarks (incl. validation) |
|-------|------------------|-------|--|--------------------------|---|---|
| | | | | | | Patient may give Age or DOB. One of the 2 is mandatory |
| | | M | Entry Field | Enter | Nil | Validate as per the DOB and display the patient age if DOB is selected Patient may give Age or DOB. One of the 2 is mandatory |
| 11. | Age unit years | M | A current age unit of patient i.e. in year's month's days and hours. | Display Select | Captured from DOB. Age unit master | Validate as per the DOB and display the patient age in yrs, days, months and hours. |
| 12. | Age group | O | Self explanatory | Select | Age group master | Based on the age captured, the age group is to be automatically picked from the master |
| 13. | Gender | M | Self explanatory | Select | Gender master (male, female, others) | Gender should be automated based on the title selected. Ex. if Title selected as Mr. Gender should selected as Male. If Title selected as Dr. Gender auto populate is not required user will select and it's mandatory. |
| 14. | Nationality | M | Self Explanatory | Select | Nationality Master | Nil |
| 15. | Foreign Patient | O | Self Explanatory | Display | | When Nationality above selected is other than the rule defined Nationality, then this is to be displayed |
| 16. | Ethnicity | O | For e.g. Asian, Oriental, Arabic, Caucasian etc. | Select | Ethnicity master | When the Nationality is selected the ethnicity should be automatically displayed, based on the link between Nationality and ethnicity. If the user wants to change the ethnicity (default), the same should be provided |
| 17. | Email | M | E- mail id of patient | Enter | Nil | Nil |
| 18. | Send email | O | Send email (yes /No) | Select | Send – email tab | Nil |
| 19. | Residence number | O | Self explanatory | Enter | Nil | This field is mandatory or not is configured in Registration Master. |

| S. No | Field Name | O/M * | Description/explanation/ formula | Display / Select / Enter | Source (Input) | Remarks (incl. validation) |
|--|------------------------|-------|---|--------------------------|--------------------------------|--|
| | | | | | | Option to make Residence Number Compulsory in the Registration Screen. |
| 20. | Mobile Number | O | Self explanatory | Enter | Nil | Nil |
| 21. | Marital Status | M | Self explanatory | Select | Master | Nil |
| 22. | Payment Type | M | Type of payment can be self-paying or sponsored | Select | Patient type master | Nil |
| 23. | Family Head Indicator | M | Indicates family PIN no. head | Select Check box | | Default this is checked. If a patient family Head is already registered with Hospital, this field can be unchecked and Family Head PIN enters in Link PIN number and it should be Mandatory. |
| 24. | Link Reg. no. | O | To link to a group or family PIN no. either by entering a known no. or select | Select Enter | Registration record Nil | Nil As per the definition of attachment of groups in the registration type master. The groups as per the group master. |
| 25. | Black List – Financial | O | Black list the Patient | Select | Black List Master | Enabled only in a query mode. Should Display Warning Message “ the patient is Blacklisted” in all transaction screen, when this flag is on |
| 26. | Capture photo | O | Self explanatory | Select | Photo tab | Web cam photo for identification capture the photo of mother and baby |
| 27. | Upload the photo | O | Self explanatory | Select | Display the uploaded photo. | Nil |
| Communication Details (Present & Permanent) | | | | | | |
| 28. | Present Address | M | Block Address | Enter | Nil | Multi line text box will display. |
| 29. | City | M | Self explanatory | Select | City /state/ Country master | Nil Selection sequence should be Country, State and city. |

| S. No | Field Name | O/M * | Description/explanation/ formula | Display / Select / Enter | Source (Input) | Remarks (incl. validation) |
|-------------------------|---------------------|-------|---|--------------------------|-----------------------------|---|
| 30. | State | M | Self explanatory | Select | City /state/ Country master | Selection of State system filters Cities. Selection sequence should be Country, State and city. |
| 31. | Country | M | Self explanatory | Select | City /state/ Country master | Selection of country should filter States. Selection sequence should be Country, State and city. |
| 32. | Pin code | NA | Self explanatory | Enter | | Nil |
| 33. | Copy Address | O | Check Box | Select | | Copy the present address |
| 34. | Permanent Address | M | Block Address | Enter | Nil | Multi line text box will display. |
| 35. | City | M | Self explanatory | Select | City /state/ Country master | Nil Selection sequence should be Country, State and city. |
| 36. | State | M | Self explanatory | Select | City /state/ Country master | Selection of State system filters Cities. Selection sequence should be Country, State and city. |
| 37. | Country | M | Self explanatory | Select | City /state/ Country master | Selection of country should filter States. Selection sequence should be Country, State and city. |
| 38. | Pin code | NA | Self explanatory | Enter | | Nil |
| Referral Details | | | | | | |
| 39. | Referred Type) | O | Type of individual who has referred patient to Hospital for e.g. Doctor , relative, friends | Select | Master of categories | Nil |
| 40. | Name of referred by | O | If referred by tab is selected, then this field becomes mandatory | Enter | Nil | Nil |
| 41. | Detail Address | O | Self explanatory | Enter | Nil | Nil |

| S. No | Field Name | O/M * | Description/explanation/ formula | Display / Select / Enter | Source (Input) | Remarks (incl. validation) |
|----------------------|------------------------------|-------|---|--------------------------|-----------------------------|---|
| 42. | City | O | Self explanatory | Select | City /state/ Country master | Nil |
| 43. | State | NA | Self explanatory | Display | City /state/ Country master | State will be displayed – city / state/ country master – at the select of city. |
| 44. | Country | NA | Self explanatory | Display | City /state/ Country master | Country will be displayed – city / state/ country master – at the select of city. |
| 45. | Telephone no of referred by. | O | Self explanatory | Enter | Nil | Nil |
| 46. | Office no. of referred by | O | Self explanatory | Enter | Nil | Nil |
| 47. | Residence no. of referred by | O | Self explanatory | Enter | Nil | Nil |
| 48. | Mobile no. of referred by | O | Self explanatory | Enter | Nil | Nil |
| Kin Details | | | | | | |
| 49. | Name of Kin | M | If Kin details tab is selected, then this field becomes mandatory | Enter | Nil | Nil |
| 50. | Gender of Kin | O | Self explanatory | Select | Gender master | Nil |
| 51. | Relationship with patient | O | Self explanatory | Select | Relationship Master | Nil |
| 52. | Telephone Number of Kin | O | Self explanatory | Enter | Nil | Nil |
| 53. | Mobile no. of Kin | O | Self explanatory | Enter | Nil | Nil |
| 54. | Email id of Kin | O | Self explanatory | Enter | Nil | Nil |
| Other Details | | | | | | |
| 55. | Blood group of patient | O | Blood group | Select | Blood group master | Nil |
| 56. | Hospital Confirmed | O | If blood group is confirmed by hospital user should enter 'yes' else 'no' | Enter | | |
| 57. | Religion | O | Self explanatory | Select | Religion master | Nil |
| 58. | Occupation of patient | O | Self explanatory | Select | Occupation master | Nil |
| 59. | Income of patient | O | Self explanatory | Select | Income master | Nil |
| 60. | ID type | O | Type of ID (identity proof) of patient | Select | ID (ID master) | Multiple ID types can select. |
| 61. | ID number | O | Self explanatory | Enter | Nil | Option required for adding multiple |

| S. No | Field Name | O/M * | Description/explanation/ formula | Display / Select / Enter | Source (Input) | Remarks (incl. validation) |
|-------|--|-------|--|--------------------------|----------------|---|
| | | | | | | identification types and numbers for selected patient. |
| 62. | SMS | NA | By default SMS will be displayed | Display | Master | Nil |
| 63. | Send SMS | O | Send SMS (yes /No) | Select Check box | Nil | If it is selected, Mobile Number should be mandatory. |
| 64. | Print for bar code labels | M | Option to print the bar code labels | Select | Nil | Nil |
| 65. | Print for bar code labeled Hospital card | M | Option to print Bar code / card | Select | Nil | Nil |
| 66. | Print registration form | M | Self explanatory- Option to print the blank form of registration without entry of fields | Select | Print tab | Print specifications and the fields to be printed are mentioned in the report section |

3.2 Register Newborn Patient

3.2.1 Description

- If a baby born in the hospital and any Hospital Services or Medication is required, Patient Registered as Newborn Patient.
- System allows Newborn Registration via Online or Patient /Kin's approaching Hospital Service Desk.
- Newborn Registration is same as **Internal Patient** Registration with extra information mentioned below
- If any baby comes to hospital for services or medication, patient will get registered as Internal Patient.
- System allows for update the existing details.

3.2.2 Main Flow - Newborn Registration

- 3.2.2.1 User selects "Newborn" as Registration type from Registration Type List.
- 3.2.2.2 User follows the Internal Patient Registration steps.
- 3.2.2.3 System provides newborn details section to capture extra details apart from internal patient details as configured in Registration Type Master.
- 3.2.2.4 User selects or enters Mother's MR No., Delivery date, Delivery time, Weight of baby, weight units of measurement, Type of gestation, Type of delivery.

3.2.3 Business Rules

- 3.2.3.1 Configure validation rules / Fields for identify the duplicate registrations.

3.2.4 Screen Layout

| Personal Details | New Born Details | Communication | Referral | Kin details | Others |
|--|----------------------|----------------------------|----------------------------|--|--------|
| Mother's Reg. No. | | Delivery Date | | Delivery Time | |
| <input type="text"/> | | <input type="text"/> | | <input type="text"/> | |
| Display Mother name | | | | | |
| Gravida | Para | Weight/Unit of measurement | Height/Unit of measurement | | |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | | |
| <input type="checkbox"/> Send SMS <input type="checkbox"/> Send E-mail | | | | | |
| | | | | <input type="button" value="Save"/> <input type="button" value="Clear"/> | |

3.2.5 Screen Elements:

All Internal Patient screen elements along with bellow screen elements.

| S. No | Field Name | O/M * | Description/explanation/ formula | Display / Select / Enter | Source (Input) | Remarks (incl. validation) |
|-------------------------|---------------|-------|--|--------------------------|---------------------------------|---------------------------------|
| New Born Details | | | | | | |
| 1. | Delivery date | M | Self explanatory | Select | Calendar master (date calendar) | Nil |
| 2. | Delivery time | M | Self explanatory | Select | | Nil |
| 3. | Gravida | M | Gravidity includes all confirmed pregnancies. Each pregnancy is only counted one time, even if the pregnancy was a multiple gestation, such as twins or triplets. For example, a woman who has had a miscarriage at 8 weeks of pregnancy, a birth of twins at 36 weeks of pregnancy, and a birth of a single baby at 40 weeks of pregnancy is a gravida 3; she has had 3 confirmed pregnancies | Enter | | Enter numbers (limit to 2 gits) |

| | | | | | | |
|-----|---------------------|---|--|---------|------------------------------|--|
| 4. | Para | M | Parity reflects the total number of births after 20 weeks, not the total number of infants born. Using the same example as above, the woman with one 8-week pregnancy loss, a live birth of twins, and a live birth of a single infant would be a para 2, even though she has given birth to 3 infants and has been pregnant 3 times | Enter | | Enter numbers (limit to 2 gits) |
| 5. | Weight of baby | M | Self explanatory | Enter | | Allow decimals |
| 6. | Unit of measurement | M | Self explanatory | Select | Unit of measurement master | |
| 7. | Height of baby | M | Self explanatory | Enter | | Allow decimals |
| 8. | Unit of measurement | M | Self explanatory | Select | Unit of measurement master | |
| 9. | Type of delivery | M | Types i.e. normal or any procedures or operative i.e. Cesarean section | Select | Master of types of delivery. | Nil |
| 10. | Mother's MR No. | M | Mother's MR No. Number | Select | Enter | Mandatory. Mother's MR No. is to be linked to the baby. |
| 11. | Mother Name | | Mother name | Display | | Once the user selects the mother's MR No., the mother's name will be displayed |

3.3 Merge Duplicate Registrations

3.3.1 Description

- MRD Department audit duplicate registration records periodically.
- System allows to Merge Duplicate Registration records of same patient.
- System allows merging Internal Registration record with other Internal Registration of same patient.
- System should not allow merging Internal Registration record with External Registration of same patient but vice a versa should be allowed.

3.3.2 Main Flow

- 3.3.2.1 System provides an option to search for duplicate patient registration records.
- 3.3.2.2 System to display list of registrations for the selected criteria.
- 3.3.2.3 User selects list of duplicate registrations to be merged.
- 3.3.2.4 User indicates one registration as default registration which will be active further.
- 3.3.2.5 Upon save, system should merge the records.
- 3.3.2.6 Merged MR No. gets deactivated and such numbers will not be part of further searches.

3.3.3 Post Conditions

- System displays the Merge confirmation message and ready for another new merge.

3.3.4 Screen Layout

Merge Duplicate Registrations

First Name

Last Name

DOB

Mobile

Email

Address

Gender

Search

Reset

| Select | Type | MR No. | Patient Name | Gender | Age | DOB | Mobile | Email | Address | Registered On | Active |
|-------------------------------------|----------|---------|-----------------------|--------|------|------------|------------|--|---|---------------|----------------------------------|
| <input checked="" type="checkbox"/> | Internal | 9012978 | Mr. Ashok Kumar Reddy | Male | 39 Y | 10/11/1978 | 8542623563 | ashok.kumar@ggk.com | MIGH 332, Road 2, KPHB Colony, Hyderabad | 01/02/2016 | <input type="radio"/> |
| <input type="checkbox"/> | Internal | 9042312 | Mr. Ashoka Reddy | Male | 50 Y | 01/03/1966 | 9849022325 | | 375, Martha Enclave, Nizampet, Hyderabad | 01/02/2016 | <input type="radio"/> |
| <input checked="" type="checkbox"/> | External | 32302 | Mr. Ashok K Reddy | Male | 39 Y | 10/11/1978 | 9821212323 | ashokreddy@gmail.com | MIGH 332, Road 2, KPHB Colony, Hyderabad | 01/02/2016 | <input type="radio"/> |
| <input checked="" type="checkbox"/> | Internal | 9120384 | Mr. K Ashok Reddy | Male | 39 Y | 10/11/1978 | 9821212323 | ashokreddy@gmail.com | MIGH 332, Road 2, KPHB Colony, Hyderabad | 01/02/2016 | <input checked="" type="radio"/> |
| <input checked="" type="checkbox"/> | Internal | 9238819 | Mr. K Ashok | Male | 39 Y | 10/11/1978 | 9821212323 | ashokreddy@gmail.com | Flat 212 A, Rain tree Towers, KPHB, Hyderabad | 01/02/2016 | <input type="radio"/> |

Merge

Clear

3.3.5 Screen Elements

| S. No. | Field | O/ M | Description/ explanation/Formula | Display/ Select / Enter | Source (Input) | Remarks (Including Validation) |
|-----------------|------------|------|----------------------------------|-------------------------|----------------|---|
| Search Criteria | | | | | | |
| 1. | First Name | O | Self Explanatory | Enter | | |
| 2. | Last Name | O | Self Explanatory | Enter | | |
| 3. | DOB | O | Self Explanatory | Enter | | |
| 4. | Mobile | O | Self Explanatory | Enter | | |
| 5. | Email | O | Self Explanatory | Enter | | |
| 6. | Address | O | Self Explanatory | Enter | | |
| 7. | Gender | O | Self Explanatory | Enter | | |
| 8. | Search | | | | | One of the above fields are mandatory. On click, system should retrieve the patients for the given combination. |

| S. No. | Field | O/ M | Description/ explanation/Formula | Display/ Select / Enter | Source (Input) | Remarks (Including Validation) |
|-------------------------|---------------|------|--|----------------------------|----------------------|---|
| 9. | Reset | | | | | Resets the entered criteria and the display fields |
| Display criteria | | | | | | |
| 10. | Select | | | Select | Input | User needs to select the registrations that are to be merged |
| 11. | Type | | Self Explanatory | Select | Registration Details | Patient Registration Type |
| 12. | MR No. | | Self Explanatory | Display | Registration Details | Patient MR No. is to be displayed |
| 13. | Patient name | | Self Explanatory | Display | Registration Details | Patient Name |
| 14. | Gender | | Self Explanatory | Display | Registration Details | Patient gender |
| 15. | Age | | | | | Patient Age and units |
| 16. | DOB | | | | | Patient DOB |
| 17. | Mobile | | | | | Patient mobile number |
| 18. | Email | | | | | Patient Email Id |
| 19. | Address | | Self Explanatory | Display | Registration Details | Patient present address |
| 20. | Registered On | | Self Explanatory | Display | Registration Details | Patient registered date |
| 21. | Active | | The active registration | | | User needs to select one of the selected patient. The option button will be disabled for the ones which are not selected. Also, the button will be disabled if the patient type is External, even if the patient is selected. |
| 22. | Merge | | Saves the record for merging | | | On click the selected patient records will be merged |
| 23. | Clear | | Clears the user selection in the grid. | | | Clears the selection done by the user |

3.4 Search Patient

3.4.1 Description

- System provides an option for search Registered Patients.
- User can select a patient for further actions like Update and View patient details.

Requirements For Registration Management

3.4.2 Preconditions

3.4.2.1 User should be logged-in and have access permission to use this use case.

3.4.3 Main Flow

3.4.3.1 User selects Patient search screen.

3.4.3.2 User selects the search criteria like Registration type, Patient Gender, Name of the Patient, DOB, MR No., Phone number etc.

3.4.3.3 User can search the family MR No. linked to Patient MR No.

3.4.3.4 If only one MR No. is linked to the Family MR No. It should automatically display its details.

3.4.3.5 If more than one MR Nos are linked to the Family MR No. then it should display all the MR Nos linked for the same and on the selection of the particular MR No. it should be possible to view the details of services ordered / invoices raised against that patient.

3.4.3.6 System provides an option to searching the patient details by photo

3.4.3.7 Request for search.

3.4.3.8 System displays Search Result.

3.4.4 Post Conditions

3.4.4.1 System allows for select a record for any action like Update and View patient information.

3.4.4.2 On selection of a record system opens the respective entry use case for update.

3.4.5 Screen Layout

SEARCH PATIENT

Registration Type

Registration No.

First Name

Last Name

Gender

Mobile No.

Email Id

DOB

Registered Between Dates

Address









































Country

State

City

Search

Clear

| Registration No. | Patient Name | Gender | Age | DOB | Mobile | Email | Address | Registered On | Patient Details |
|------------------|---------------------|--------|----------|------------|------------|--|---|---------------|---|
| 9012978 | Mr. Ashok Kumar | Male | 39 Years | 10/11/1978 | 9821212323 | Ashok.kumar@ggk.com | MIGH 332, Road 2, APHB Colony, Kukatpally | 01/02/2016 |      |
| 9012978 | Mr. Steve Martin | Male | 39 Years | 10/11/1978 | 9821212323 | Ashok.kumar@ggk.com | 375, Road 2, Madhapur, Hitech City | 01/02/2016 |      |
| 9012978 | Ms. Rene Walker | Female | 39 Years | 10/11/1978 | 9821212323 | Ashok.kumar@ggk.com | 375, Road 2, Madhapur, Hitech City | 01/02/2016 |      |
| 9012978 | Ms. Sultana Saif | Male | 39 Years | 10/11/1978 | 9821212323 | Ashok.kumar@ggk.com | 375, Road 2, Madhapur, Hitech City | 01/02/2016 |      |
| 9012978 | Mr. Victor Lennings | Male | 39 Years | 10/11/1978 | 9821212323 | Ashok.kumar@ggk.com | 375, Road 2, Madhapur, Hitech City | 01/02/2016 |      |
| 9012978 | Mr. Veera Reddy | Male | 39 Years | 10/11/1978 | 9821212323 | Ashok.kumar@ggk.com | 375, Road 2, Madhapur, Hitech City | 01/02/2016 |      |
| 9012978 | Mr. Martin Blue | Male | 39 Years | 10/11/1978 | 9821212323 | Ashok.kumar@ggk.com | 375, Road 2, Madhapur, Hitech City | 01/02/2016 |      |
| 9012978 | Mr. Selvan Kumar | Male | 39 Years | 10/11/1978 | 9821212323 | Ashok.kumar@ggk.com | 375, Road 2, Madhapur, Hitech City | 01/02/2016 |      |

3.4.6 Screen Elements

| S. No. | Field | Display/ Select / Enter | Remarks (Including Validation) |
|------------------------|----------------------|-------------------------|---|
| Search Criteria | | | |
| 1. | Registration type | Multi-Select | Select the type of registration |
| 2. | MR No. | Enter | Patient MR No. |
| 3. | First Name | Entry | Self-Explanatory |
| 4. | Last Name | Entry | Self-Explanatory |
| 5. | Gender | Select | Select the gender from the drop down |
| 6. | Mobile Number | Entry | Self-Explanatory |
| 7. | DOB | Entry | Self-Explanatory |
| 8. | Email Id | Entry | Self-Explanatory |
| 9. | Registered From Date | Select / Enter | The registration date |
| 10. | Registered From Date | Select / Enter | The registration date |
| 11. | Address | Enter | Patient Present address |
| 12. | Country | Select | Self-Explanatory |
| 13. | State | Select | Self-Explanatory |
| 14. | City | Select | Self-Explanatory |
| 15. | Search | | User should at least select or enter one of the above input parameters. If no records are searched for the given parameter(s), system to warn the user that no records found for the given criteria. |
| 16. | Reset | | Clears the search parameters and the display fields and resets the form |
| Display Fields | | | |
| 17. | Registration Type | Display | Display registration type |
| 18. | MR No. | Display | Display MR No. |
| 19. | Patient Name | Display | Display Patient name |
| 20. | Gender | Display | Display patient's gender |
| 21. | Age & Age Units | Display | Display patient's age and units |
| 22. | DOB | Display | Display patient's DOB |
| 23. | Mobile | Display | Display patient's mobile no. |
| 24. | Email | Display | Display patient's email |
| 25. | Address | Display | Display patient's address |
| 26. | Registered On | Display | Display patient's registration date |
| 27. | Edit Profile | | If the user has the role permission then for the selected patient, system to navigate to the registration screen for editing the patient demographic details |
| 28. | Book Appointment | | On click of this icon, system to navigate to the Doctor Appointment function passing the patient parameters to book appointment |
| 29. | Send SMS | | On click of this icon system should provide a facility to send sms to the patient. |
| 30. | Send Email | | On click of this icon system should provide a facility to send email to the patient. |
| 31. | View Appointments | | On click of this icon system should provide a facility to view patient past and future appointments |

3.5 Reports

3.5.1 Registration Count Report

The Registration Count Report is to analyze the number of patients getting registered in a particular period of time, or for a particular registration type etc.

Main Flow

- To view the list of registrations that have occurred during a specified period of time: Specify the required period using From Date and To Date fields.
- To view the list of registrations those fall under a particular age group: Select the age group.
- To view the list of registrations done for a particular location: Select the Country, States, and Cities
- To view the list of registrations by registration type: Select the Registration Type as Internal, External etc.
- To view the list of registrations done for a particular registration mode: Select the Registration mode.
- Click the Generate button to generate a Registration count with the details.
- Click the Cancel button to clear the field and enter another record.

Note: It is mandatory to mention the Date Range: from and to date along with the other criteria for search.

Screen Layout

- To view the list of registrations that have occurred during a specified period of time: Specify the required period using From Date and To Date fields.

| S. No. | Report Name | Selection Criteria | Output Fields | Print Format |
|--------|-------------------------|--|--|--------------|
| 1 | Number of Registrations | From Date To Date From Time To Time City (one or multiple). State (one or multiple) Country (one or multiple). Age group wise. Consultant wise. From External to Internal. Financial group | Serial no. Patient names. Age. Gender Staff patient. City of patient State. Country. Gender Date of registration Total no. of registration | |

3.6 Print / Display Report

3.6.1 Description

- System provides an option to select criteria for generate report
- System generates following types of reports based on given criteria.
 - Number of registrations.
 - Generate Bar code strips(to be applied on Patient Medical Folder)
 - Print bar coded Hospital card

- New Registration form for manual register.
- Duplicate Registration report.

3.6.2 Preconditions

3.6.2.1 User should be logged-in and has access permission.

3.6.2.2 For printing reports Printer should be available.

3.6.3 Main Flow

3.6.3.1 User select option for generate report.

3.6.3.2 User selects report type from the list.

3.6.3.3 System provides filter criteria based on selected type of report as listed in below table.

3.6.3.4 On user request report generates.

| S. No. | Report Name | Selection Criteria | Output Fields | Print Format |
|--------|---|--|---|--------------|
| 1 | Number of Registrations | From Date To Date From Time To Time City (one or multiple). State (one or multiple) Country (one or multiple). Age group wise. Consultant wise. From External to Internal. Financial group | Serial no. Patient names. Age. Gender Staff patient. City of patient State. Country. Gender Date of registration Total no. of registration | |
| 2 | Bar code – (to be applied on Patient medical Folder): | From Date To date From Time To Time Location PIN number on the barcode. Gender Print Bar code - Yes/No | Date Location PIN number Bar code | |
| 3 | Print bar coded Hospital card | PIN Number | Patient name (consolidated name including patient title, patient first name, last name). Patient age. Gender of patient. PIN no of the patient. Photo of the patient. Blood group of the patient. Address of patient Bar code Name of Hospital | |

| S. No. | Report Name | Selection Criteria | Output Fields | Print Format |
|--------|------------------------|---|--|--------------|
| | | | Address of Hospital. Logo of Hospital | |
| 4 | New Registration Form | Report Language | New Registration Form Format | |
| 5 | Duplicate Registration | From Date To Date Display Type(Display, Print, Export to file) | | |

3.6.3.5 Registration Form Format

| | | |
|--|------------|-------------------|
| Hospital Logo | | |
| <Hospital Name> <Hospital Address> <Tel : 24451515. Fax : 24449199> | | |
| Registration Number. <_____> | | |
| Registration Date: DD/MM/YYYY. | | |
| Patient Name : _____ <div style="display: flex; justify-content: space-around; width: 100%;"> (Last name) (First) (Middle) </div> | | |
| Date of Birth ____/____/____ Age: _____ year /month/Day <div style="display: flex; justify-content: space-around; width: 100%;"> DD MM YY </div> | | |
| Marital Status <_____> | | |
| Gender: <Male/Female> | | |
| Residential Address: _____ | | |
| Tel no. / Resi no. _____ Mob no. _____ | | |
| Kin Details | | |
| Relation: <_____> | | |
| _____ | _____ | _____ |
| Last name | First name | Middle name |
| Referring Doctor's Name _____ | | |
| I understand that my medical record will be destroyed 3 years after my last visit to this Hospital. | | |
| I agree to abide by the schedule of charges, rules and regulations of the Hospital. | | |
| Signature _____ | | Name _____ |

4. Interfaces

4.1. Hardware Interfaces

- Printer
- Webcam
- Card Printer
- Read and update Bar Coded Card/ Magnetic Strip for identification details of patient.
- Iris Scanner / Finger Print /Hand key Reader

4.2. Software Interfaces

- SMS & Email Configuration

5. Annexure

5.1. Report printing format

| S. No. | Report Name | Paper size | Stationary Type | No. of copies | Copy identity | Barcode | Authorization | Date on report | Serial number on print | Printer |
|--------|---|---|--------------------------------|---------------------------------|---|---|-----------------------|---------------------------------------|--|-----------|
| 1 | Number of Registrations Turnaround Time report | 1 st print –Running stationery of size A4 | Pre-printed stationery | 1 st print – 1 print | 1 st print – Report name | 1 st printing - Default print with barcode | NR | Display date of 1 st print | Running serial number for the selection criteria on all prints (parameter is required to define – regarding the generation of serial number and option of printing the same on the report) | Laser Jet |
| | | Reprint-Running stationery of A4 size. | Reprint-Pre-printed stationery | Reprint- 1 print | Reprint – Duplicate | Reprint-print with barcode | Reprint- Not required | Reprint-Display date | Reprint- Running serial number for the selection criteria on all prints | |
| 2 | Registration form | 1 st print –special Stationery of A4 size. | Pre printed | 1 st print – 1 print | 1 st print – Identification band | 1 st printing - Default print with barcode | NR | Display date of 1 st print | No serial no. on the print outs | Laser Jet |
| | | Reprint-special Stationery of size. (5 cm X | Reprint-Blank stationery | Reprint- 1 print | Reprint – Duplicate Registration | Reprint-print with barcode | Required | Reprint-Display date | No serial no. on the print outs | |

| | | | | | | | | | | |
|---|-------------------------|---------------------------------------|------------------|--------------------------------|---------------------------------------|---|-------------------|---------------------------------------|---|------------------|
| 3 | Hospital bar coded card | 1 st print – 4cm X 7 cm | Card stationery | 1 st print - 1print | 1 st print – Hospital card | 1 st printing - Default print with barcode | NR | Display date of 1 st print | Running serial number for the selection criteria on all prints | Card printer |
| | | Reprint- 4cm X 7 cm | Card stationery | Reprint- 1 print | Reprint – Duplicate Hospital card | Reprint- print with barcode | Reprint- Required | Reprint- Display date | Reprint- Running serial number for the selection criteria on all prints | |
| 4 | Bar code | 1 st print - 2.5 cm X 2 cm | Blank stationery | 1 st print - 1print | 1 st print – barcode | 1 st printing - Default print with barcode | NR | Display date of 1 st print | Running serial number for the selection criteria on all prints | Bar code printer |
| | | Reprint- 2.5 cm X 2 cm | Blank stationery | Reprint- 1 print | Reprint – Duplicate | Reprint- print with barcode | Reprint- NR | Reprint- Display date | Reprint- Running serial number for the selection criteria on all prints | |