# Consultation Rule and Mapping Module – Functional Specification

## 1. Consultation Rule Module

### Feature Name: Consultation Rule Setup

### Actor

* Administrator – Responsible for creating and maintaining consultation rules.
* System – Validates inputs, enforces business rules, and updates rule master list.

### Preconditions

* User must have access to Masters → Consultation Rule setup screen.
* Speciality, Provider, and CPT/CDT master data must already exist.
* User must have create/edit permissions for Consultation Rules.

### User Story

As an Administrator, I want to define consultation rules for specific medical services based on encounter and episode parameters so that consultation charges, free visits, and durations can be controlled automatically during patient billing and insurance validation.

### Workflow

1. Navigate to Masters → Consultation Rule.
2. Click on Add New Rule.
3. Enter Consult Rule Name (mandatory).
4. Enter Encounter Days, Episode Days, and Encounter Duration (hours).
5. Select Service Category (Encounter / ER Consultation / Follow-up Consultation).
6. Based on selected Service Category, Service Name auto-loads (Encounter=First, ER Consultation=Emergency, Follow-up=Follow-up).
7. Enter CPT/CDT (if applicable).
8. Define Free Visit and Free Days values.
9. Add Applicable Speciality if limited to department.
10. Add Applicable Provider if rule applies to specific doctors.
11. Click Save to store the rule.

### Business Rules & Validations

* Consult Rule Name is mandatory and must be unique.
* Encounter Days, Episode Days, and Encounter Duration must be greater than zero.
* Service Category and Service Name are mandatory fields.
* Service Name auto-populates based on Service Category and cannot be manually changed.
* At least one of Applicable Speciality or Applicable Provider must be selected.
* Free Visit and Free Days should be numeric if entered.
* Rule cannot be saved without valid CPT/CDT or Service Name.
* Rule once linked to insurance mapping cannot be deleted.
* Encounter Days and Episode Days define consultation tracking time windows.
* Free Visit defines number of charge-free consultations within Episode period.
* If both Applicable Speciality and Provider are added, provider rule takes precedence.
* Duplicate combinations of Service Category + Service Name + Department + Speciality are not allowed.
* Inactive or deleted provider cannot be added.
* Error message should show if mandatory fields are blank.
* On saving, rule becomes available for mapping.

## 2. Consultation Rule Mapping Module

### Feature Name: Consultation Rule Mapping (Insurance-wise)

### Actor

* Insurance Coordinator – Responsible for mapping consultation rules to insurance plans.
* System – Validates mappings, prevents duplicates, and enforces business rules.

### Preconditions

* At least one active Consultation Rule must exist in the master list.
* Insurance Network and Plan master data must already be configured.
* User must have access to Masters → Consultation Rule Mapping screen.

### User Story

As an Insurance Coordinator, I want to map consultation rules to each insurance network, plan, and provider so that system automatically applies the correct consultation billing and visit logic during patient registration and claim processing.

### Workflow

1. Navigate to Masters → Consultation Rule Mapping.
2. Click on Add New Reference.
3. Enter Reference Name (mandatory).
4. Select Network Name and Plan.
5. Choose Department, Speciality, and Provider.
6. Select the applicable Consultation Rule from dropdown (only active rules appear).
7. Click Add to include mapping in the list.
8. Repeat for additional mappings.
9. Click Save once all mappings are added.

### Business Rules & Validations

* Reference Name, Network Name, and Plan are mandatory.
* Only active and valid rules can be selected for mapping.
* Department, Speciality, and Provider must be valid combinations.
* A provider can have only one active consultation rule per plan.
* Duplicate mapping (same Provider + Plan + Rule) not allowed.
* Mapping cannot be deleted if used in any encounter or billing record.
* Rule dropdown shows only active rules from master.
* Department and Speciality fields filter available providers accordingly.
* Once mapping is saved, system enforces rule during encounters.
* Changes in rule details reflect for all new encounters.
* Audit trail records all create/edit/delete actions.
* Inactive provider or plan auto-inactivates mapping.
* Rule selection must not conflict with department restrictions.
* Each mapping row should be editable/deletable if unused.

### Example Scenario

Consult Rule: ACB Rule  
- Episode Days: 7  
- Encounter Duration: 8 hrs  
- Free Visit: 2  
- Free Days: 3  
- Service Category: Follow-up Consultation  
- Service Name: Follow-up  
- Applicable Speciality: Cardiology → Clinical Cardiology

Mapping:  
- Reference Name: Aamir Ins Ref  
- Network Name: Aamir Network  
- Plan: Aamir Plan  
- Department: Cardiology  
- Speciality: Clinical Cardiology  
- Provider: Kapil Dev (kapil01)  
- Rule: ACB Rule

System Result:  
When a patient visits Kapil Dev under Aamir Plan, the system automatically applies the ACB Rule:  
- 2 follow-up visits free within 3 days  
- 8 hours = one encounter window  
- New charge applies after episode period (7 days).