Dentist Database Entity Relationship Diagram
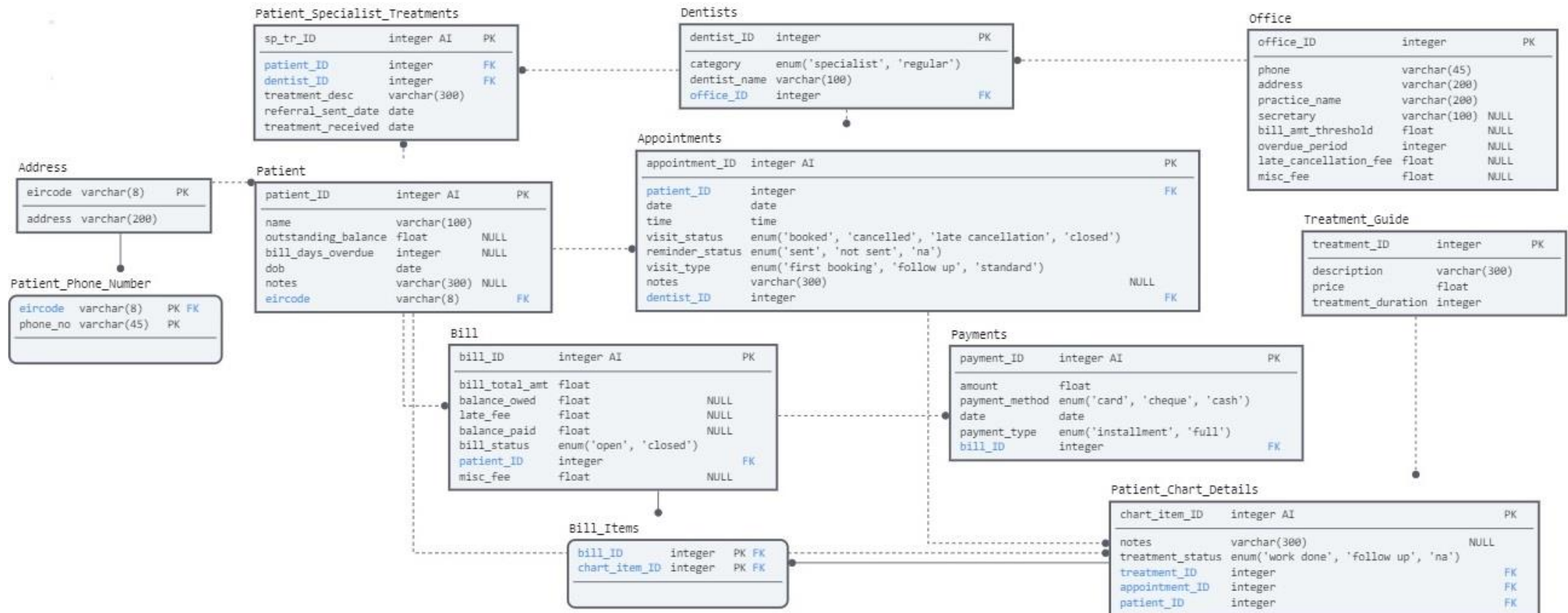
Patient_Specialist_Treatments

sp_tr_ID	integer AI	PK
patient_ID	integer	FK
dentist_ID	integer	FK
treatment_desc	varchar(300)	
referral_sent_date	date	
treatment_received	date	

Dentists

dentist_ID	integer	PK
category	enum('specialist', 'regular')	
dentist_name	varchar(100)	
office_ID	integer	FK

Office

office_ID	integer	PK
phone	varchar(45)	
address	varchar(200)	
practice_name	varchar(200)	
secretary	varchar(100)	NULL
bill_amt_threshold	float	NULL
overdue_period	integer	NULL
late_cancellation_fee	float	NULL
misc_fee	float	NULL

Address

eircode	varchar(8)	PK
address	varchar(200)	

Patient

patient_ID	integer AI	PK
name	varchar(100)	
outstanding_balance	float	NULL
bill_days_overdue	integer	NULL
dob	date	
notes	varchar(300)	NULL
eircode	varchar(8)	FK

Appointments

appointment_ID	integer AI	PK
patient_ID	integer	FK
date	date	
time	time	
visit_status	enum('booked', 'cancelled', 'late cancellation', 'closed')	
reminder_status	enum('sent', 'not sent', 'na')	
visit_type	enum('first booking', 'follow up', 'standard')	
notes	varchar(300)	NULL
dentist_ID	integer	FK

Treatment_Guide

treatment_ID	integer	PK
description	varchar(300)	
price	float	
treatment_duration	integer	

Patient_Phone_Number

eircode	varchar(8)	PK FK
phone_no	varchar(45)	PK

Bill

bill_ID	integer AI	PK
bill_total_amt	float	
balance_owed	float	NULL
late_fee	float	NULL
balance_paid	float	NULL
bill_status	enum('open', 'closed')	
patient_ID	integer	FK
misc_fee	float	NULL

Payments

payment_ID	integer AI	PK
amount	float	
payment_method	enum('card', 'cheque', 'cash')	
date	date	
payment_type	enum('installment', 'full')	
bill_ID	integer	FK

Bill_Items

bill_ID	integer	PK FK
chart_item_ID	integer	PK FK

Patient_Chart_Details

chart_item_ID	integer AI	PK
notes	varchar(300)	NULL
treatment_status	enum('work done', 'follow up', 'na')	
treatment_ID	integer	FK
appointment_ID	integer	FK
patient_ID	integer	FK

Figure 1:Dentist_db ERD

Dentist Database Relational Schema

Patient   (<u>patient_ID</u>, name, outstanding_balance, bill_days_overdue, dob, notes, eircode)

Address   (<u>eircode</u>, address)

Patient_Phone_No   (<u>eircode</u>, <u>phone_no</u>)

Appointments   (<u>appointment_ID</u>, patient_ID, date, time, visit_status, reminder_status, visit_type, notes, dentist_ID)

Patient_Chart_Details   (<u>chart_item_ID</u>, appointment_ID, treatment_ID, treatment_status, notes, patient_ID)

Treatment_Guide   (<u>treatment_ID</u>, description, price, treatment_duration)

Specialist Treatments   (<u>sp_tr_ID</u>, patient_ID, dentist_ID, treatment_desc, referral_sent_date, treatment_received_date)

Dentists   (<u>dentist_ID</u>, category, dentist_name, office_ID)

Bill   (<u>bill_ID</u>, bill_total_amt, balance_owed, late_fee, balance_paid, bill_status, patient_ID)

Bill_Items   (<u>bill_ID</u>, <u>chart_item_ID</u>)

Payments   (<u>payment_ID</u>, amount, payment_method, date, payment_type, bill_ID)

Office   (<u>office_ID</u>, phone, address, practice_name, secretary, bill_amt_threshold, overdue_period, late_cancellation_fee, misc_fee)