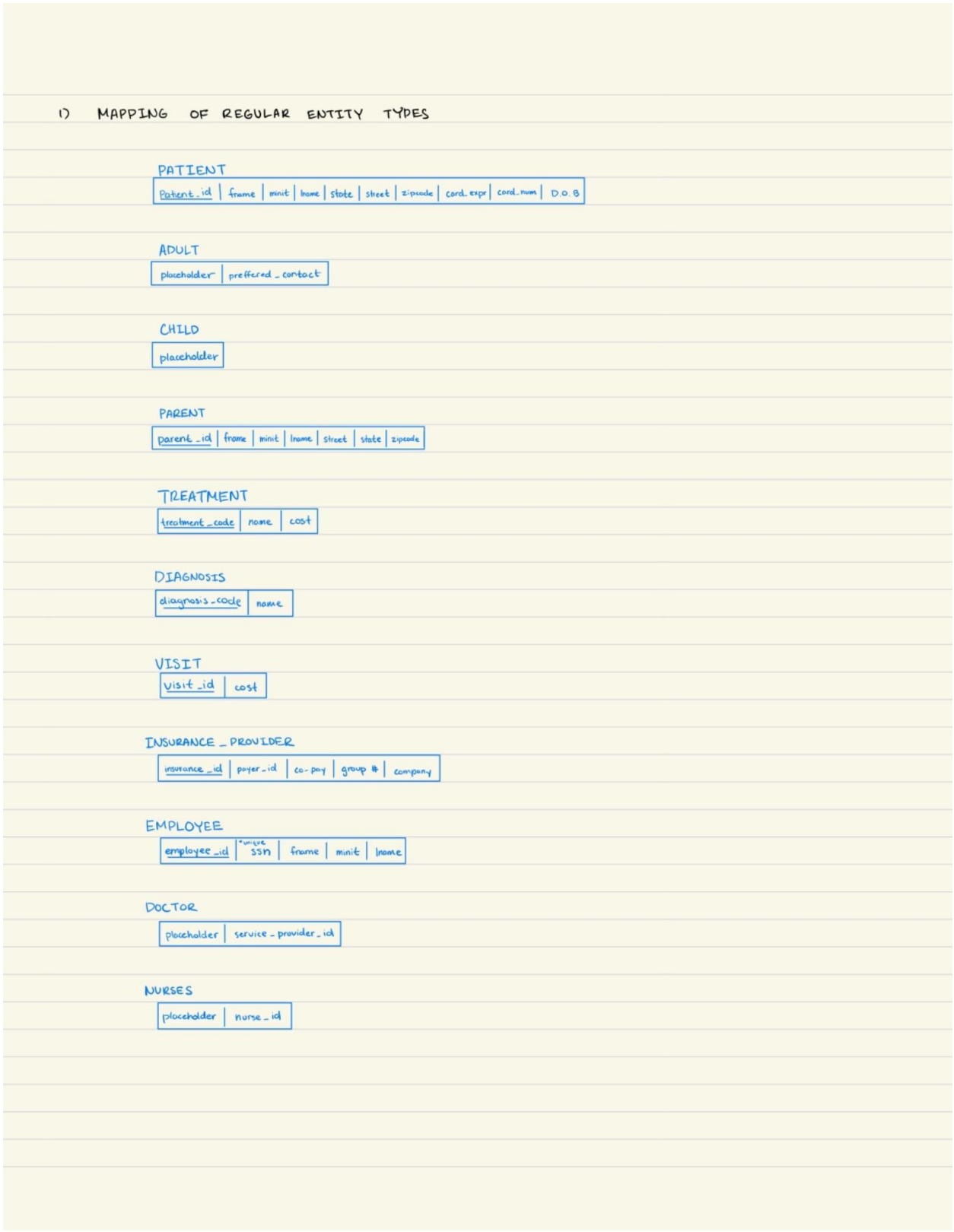
1) MAPPING OF REGULAR ENTITY TYPES



Employee.ssn and Doctor.service_provider_id and Nurses.nurse_id are unique (denoted with * later in steps)

2) MAPPING OF WEAK ENTITY (none for our diagram)

PATIENT

Patient_id	fname	minit	lname	state	street	zipcode	card_expr	card_num	D.O.B

ADULT

placeholder	preffered_contact

CHILD

placeholder

PARENT

parent_id	fname	minit	lname	street	state	zipcode

TREATMENT

treatment_code	name	cost

DIAGNOSIS

diagnosis_code	name

VISIT

visit_id	cost

INSURANCE_PROVIDER

insurance_id	payer_id	co-pay	group #	company

EMPLOYEE

employee_id	*unique ssn	fname	minit	lname

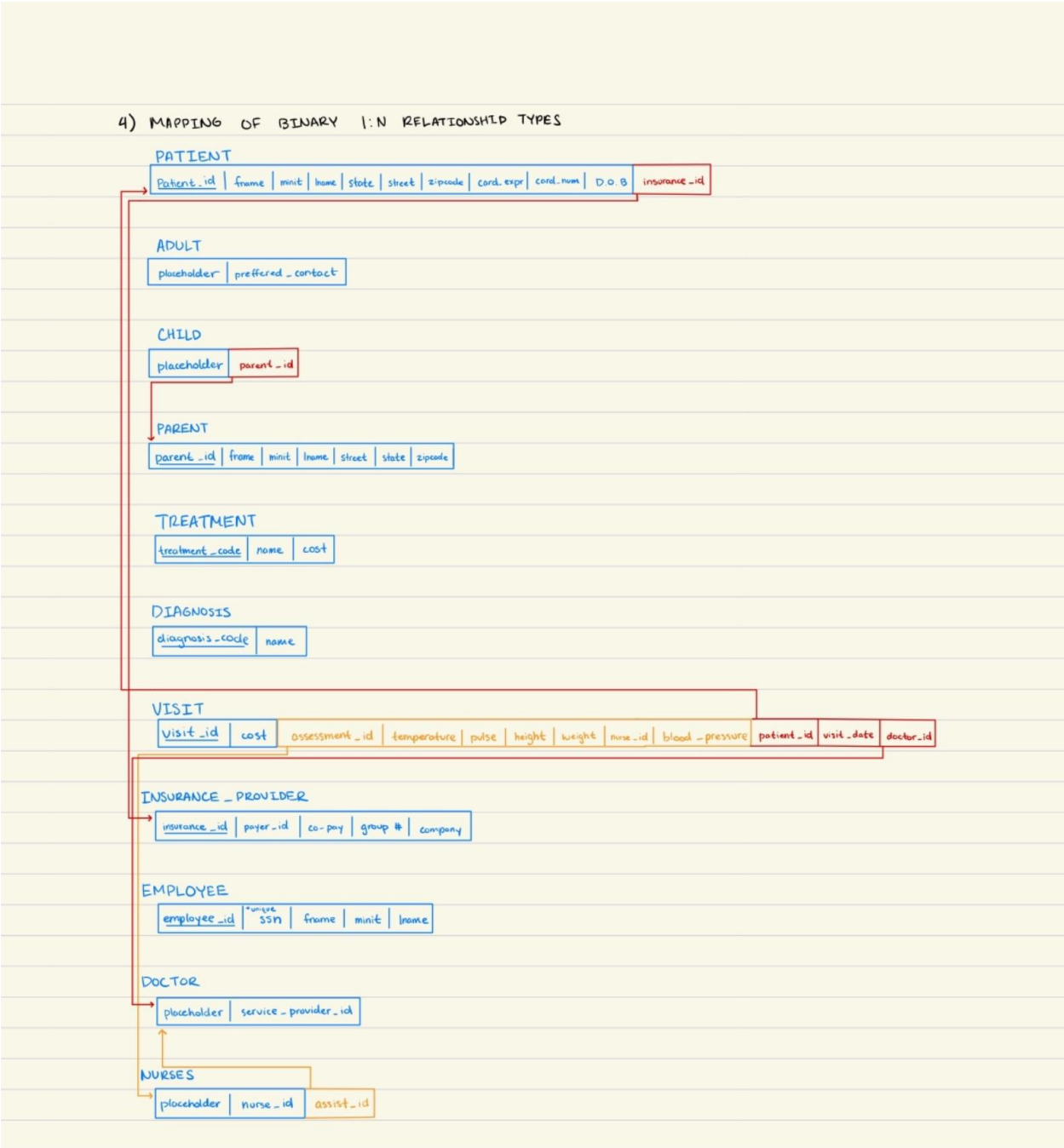
DOCTOR

placeholder	service_provider_id

NURSES

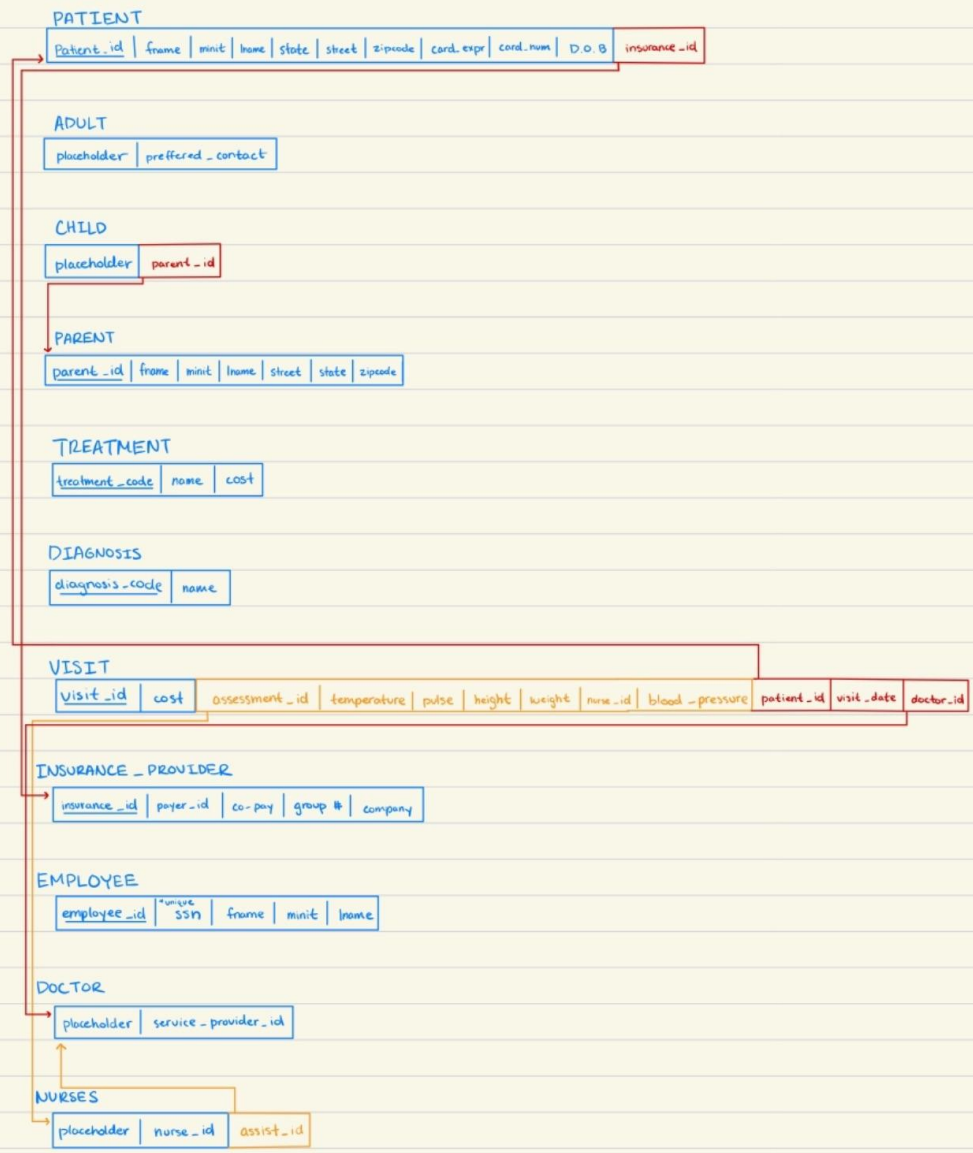
placeholder	nurse_id

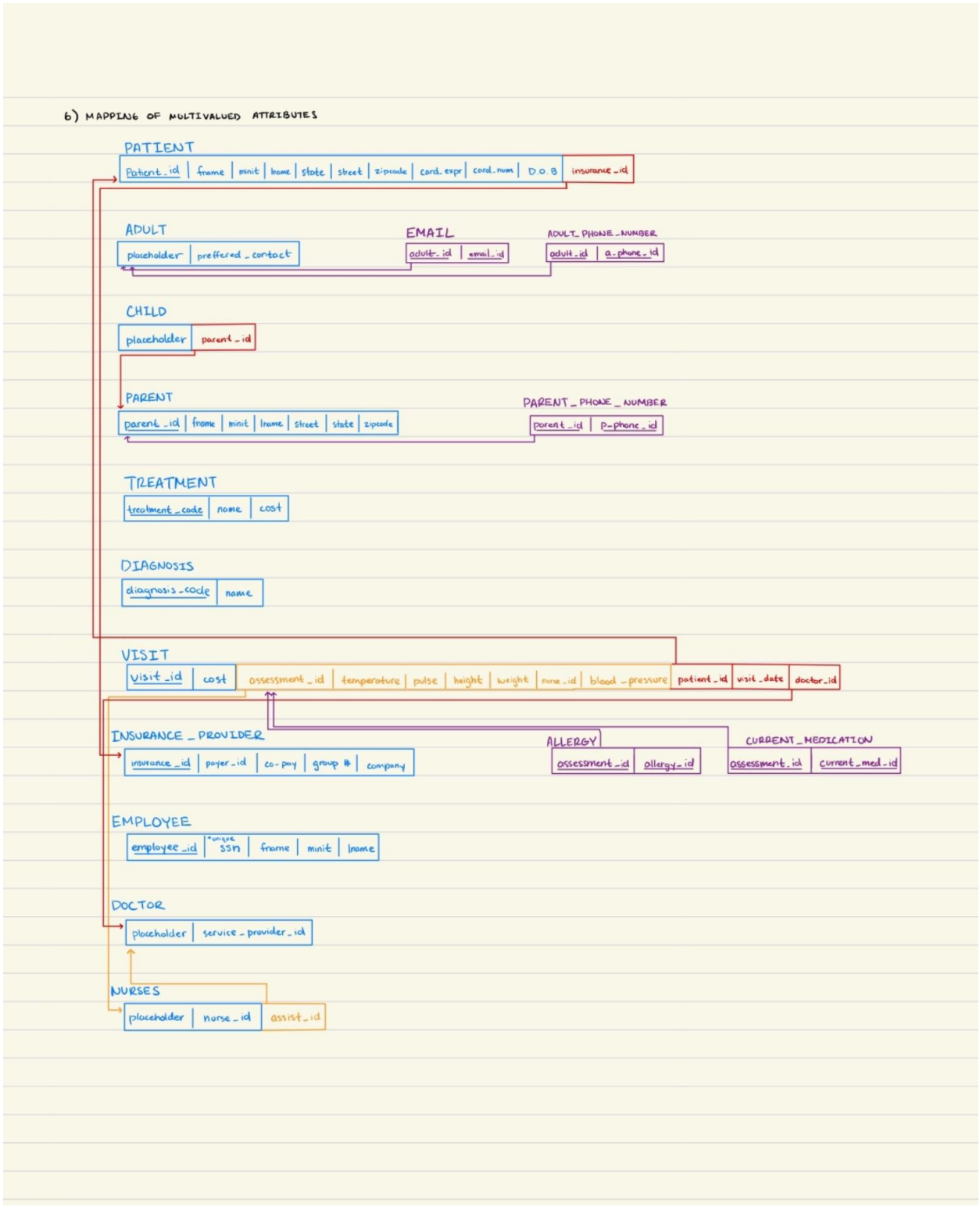
FK from Visit.assessment_id to Nurses.placeholder
FK from Nurses.assist_id to Doctor.placeholder



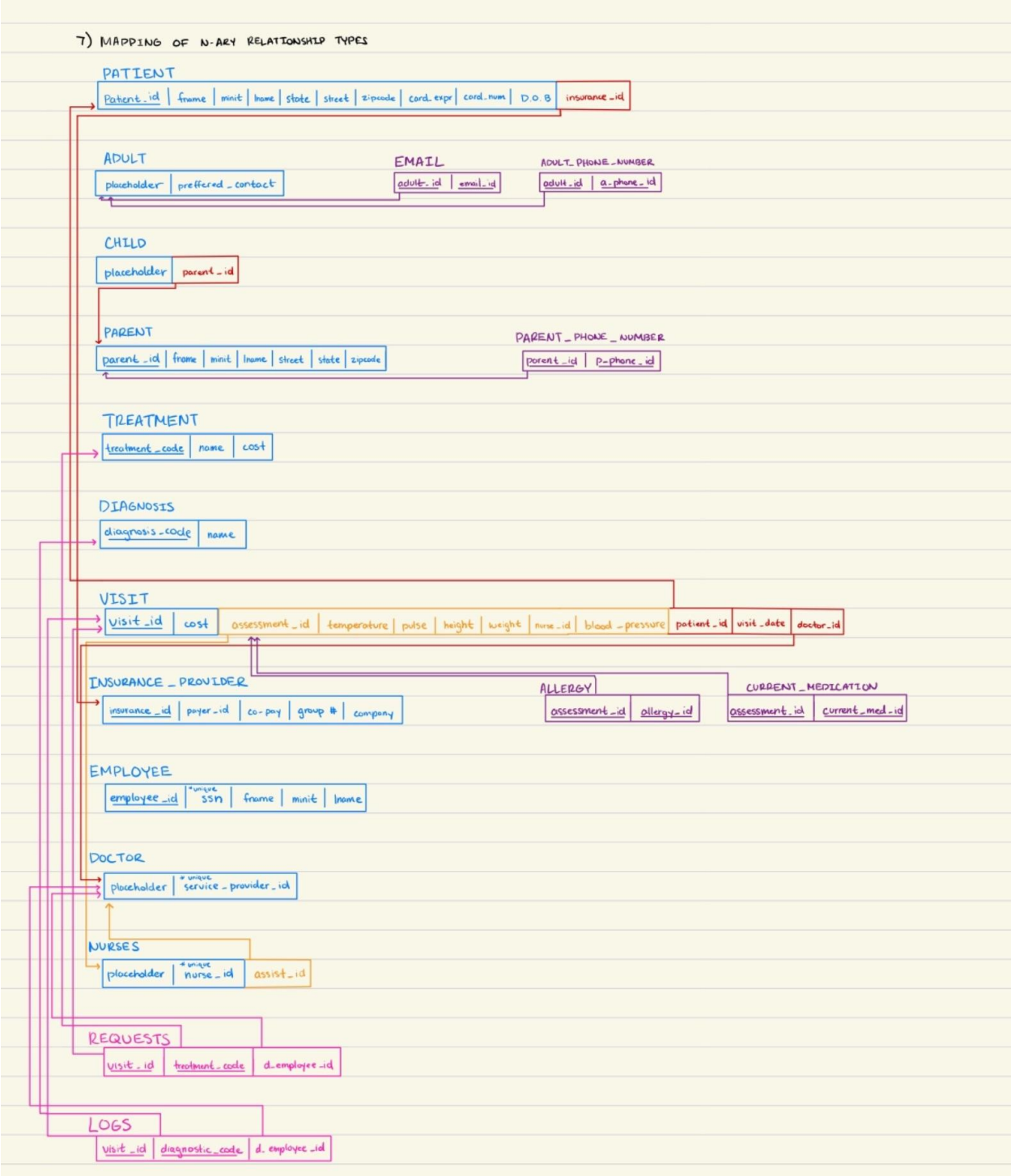
FK from Patient.insurance_id to Insurance_Providor.insurance_id
FK from Child.parent_id to Parent.parent_id
FK from Visit.patient_id to Patient.patient_id
FK from Visit.doctor_id to Doctor.placeholder

5) MAPPING OF BINARY M:N RELATIONSHIP TYPES (none for our diagram)

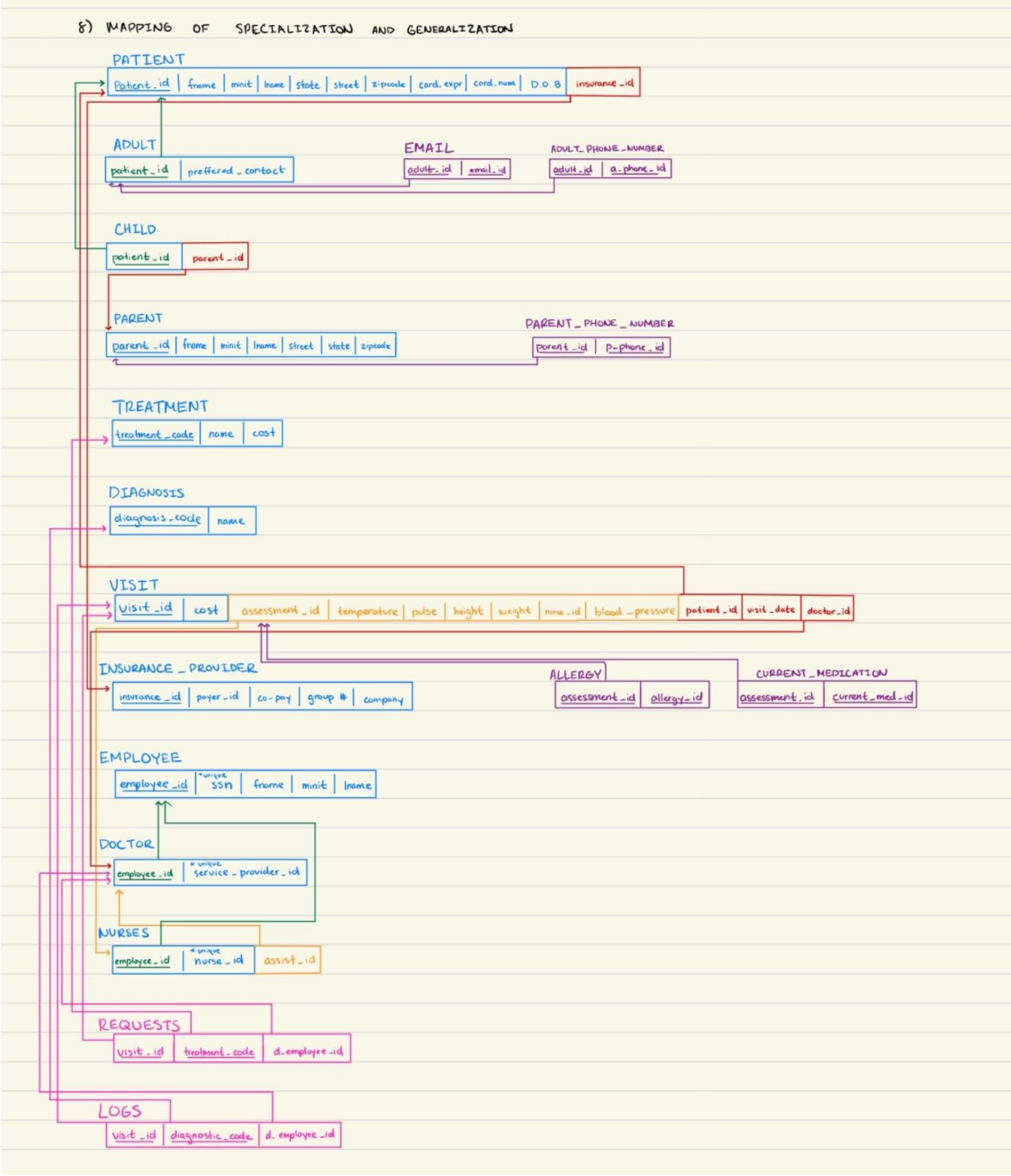




Items in purple represent multivalued attributes



Items in pink represent ternary relationships
FK from Requests.visit_id to Visit.visit_id
FK from Requests.treatment_code to Treatment.treatment_code
FK from Requests.d_employee_id to Doctor.placeholder (not included in primary due to cardinality of 1)
FK from Logs.visit_id to Visit.visit_id
FK from Logs.diagnostic_code to Diagnosis.diagnostic_code
FK from Log.d_employee_id to Doctor.placeholder (not included in primary due to cardinality of 1)



Filled in placeholders with appropriate keys based on specialization or generalization in green
FK from Nurses.employee_id to Employee.employee_id
FK from Doctor.employee_id to Employee.employee_id
FK from Child.patient_id to Patient.patient_id
FK from Adult.patient_id to Patient.patient_id

9) MAPPING OF UNION TYPES (none for our diagram)