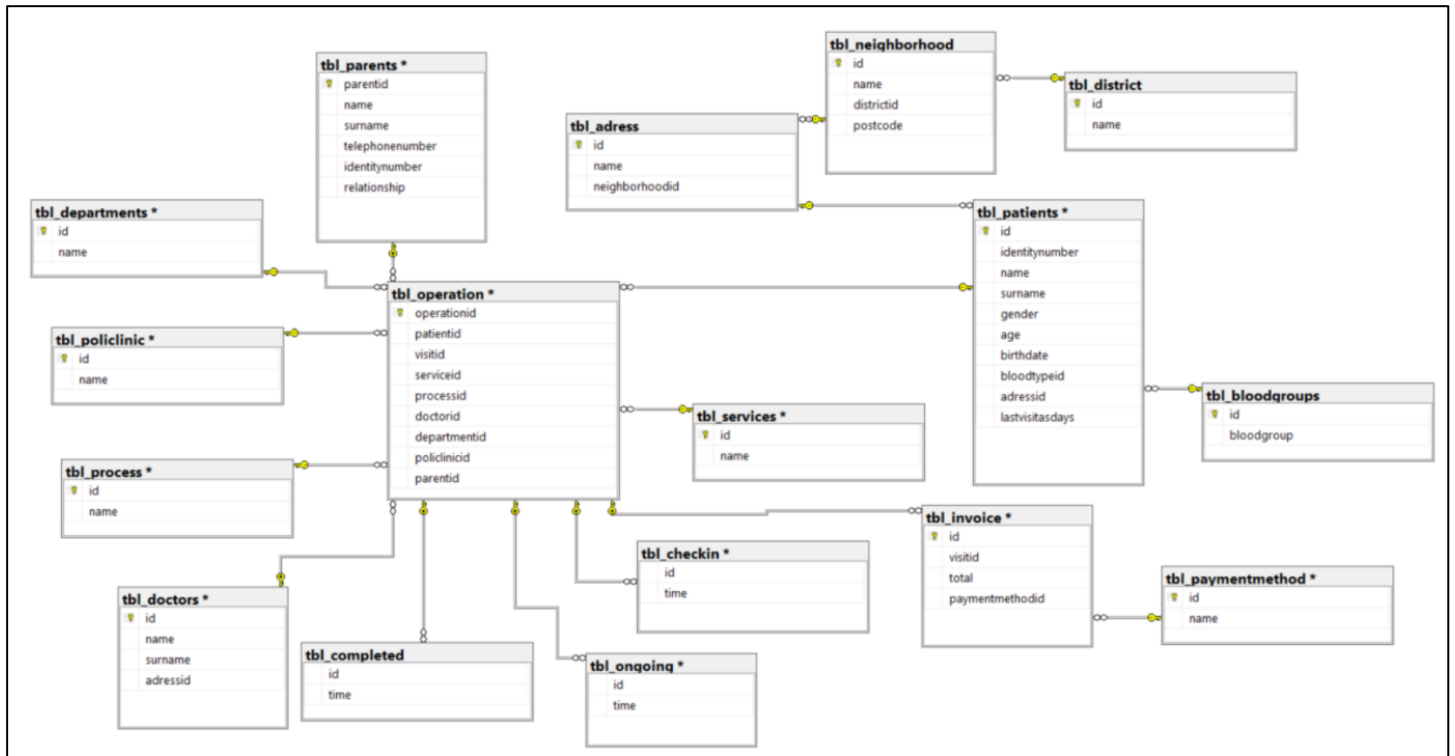# CHILDREN' HOSPITAL

DATA DICTIONARY

DATA OVERFLOW

JANUARY 2021

1. Children's Hospital Diagram

1.1. Tables

1.1.1. Table: tbl_address
Address informations.

Columns

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for address record.
	name	nvarchar(50)		Name of the
	neighbourhoodid	int		Foreign key to tbl_neighbourhood table.

Links to

	Table	Join	Title / Name / Description
⤳	tbl_neighbourhood	tbl_address.neighbourhoodid= tbl_neighbourhood.id	FK_tbl_ neighbourhood_tbl_ address_id Foreign key constraint referencing tbl_neighbourhoodid.id

Linked from

	Table	Join	Title / Name / Description
⤚	tbl_doctors	tbl_address.id= tbl_doctors.addressid	FK_tbl_ doctors_tbl_ address_id Foreign key constraint referencing tbl_ doctors.addressid
⤚	tbl_patients	tbl_address.id= tbl_patients.addressid	FK_tbl_ patients_tbl_ address_id Foreign key constraint referencing tbl_patients.addressid

Uses

Name
▦ tbl_address
▦ tbl_neighbourhood

Used by

Name
▦ tbl_address
▦ tbl_doctors
▦ tbl_patients

1.1.2.   Table: tbl_bloodgroups
Blood group informations.

Columns

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for bloodgroup record.
	name	varchar(5)		Name of blood groups.

Linked from

	Table	Join	Title / Name / Description
⤚	tbl_patients	tbl_bloodgroups.id = tbl_patients.bloodtypeid	FK_ tbl_patients_tbl_bloodgroups_bloodtypeid Foreign key constraint referencing tbl_bloodgroups.id

Name
⊞ tbl_bloodgroups
⊞ tbl_patients

1.1.3.   Table: tbl_checkin
Checkin operations according to operations table.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for checkin records.
	time	datetime		Date of checkin operations.

Links to

	Table	Join	Title / Name / Description
➤	tbl_operation	tbl_checkin.id = tbl_operation. operationid	FK_ tbl_checkin_tbl_operation. operationid Foreign key constraint referencing tbl_operation.operationid

Uses

Name
⊞ tbl_checkin
⊞ tbl_operation

1.1.4.   Table: tbl_completed
Table holding completed operations information.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for completed records.
	time	datetime		Date of the completed records.

Links to

	Table	Join	Title / Name / Description
⤳	tbl_operation	tbl_completed.id = tbl_operation. operationid	FK_ tbl_completed_tbl_operation. operationid Foreign key constraint referencing tbl_operation.operationid

Uses

Name
⊞ tbl_completed
⊞ tbl_operation

1.1.5. Table: tbl_departments
Department information.

Columns

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for departments records.
	name	nvarchar(50)		Name of the departments.

Linked from

	Table	Join	Title / Name / Description
⬿	tbl_operation	tbl_departments.id = tbl_operation. operationid	FK_ tbl_completed_tbl_operation. operationid Foreign key constraint referencing tbl_operation.operationid

Used by

Name
⊞ tbl_departments
⊞ tbl_operation

1.1.6.　Table: tbl_district
District information.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for district records.
	name	nvarchar(25)		Name of the districts.

Linked from

	Table	Join	Title / Name / Description
↤	tbl_neighbourhood	tbl_neighbourhood. districtid = tbl_disrict.id	FK_ tbl_neighbourhood. districtid Foreign key constraint referencing tbl_disrict.id

Used by

Name
⊞ tbl_district
⊞ tbl_neighbourhood

1.1.7.　Table: tbl_doctors
Doctors information.

Column

	Name	Data type	N	Description / Attributes
🔑	İd	int		Primary key for doctor records.
	name	nvarchar(30)		Name of doctors.
	surname	nvarchar(30)		Surname of doctors.
	adressid	int	N	Address of the doctors.

Links to

	Table	Join	Title / Name / Description
⤚	tbl_address	tbl_address. id= tbl_doctors.addressid	FK tbl_address_tbl_doctor_addressid Foreign key constraint referencing tbl_doctors.id

Linked from

	Table	Join	Title / Name / Description
⤙	tbl_operation	tbl_operation. doctorid = tbl_doctors.id	FK tbl_operation_tbl_doctors_doctorsid Foreign key constraint referencing tbl_operation.doctorid

Uses

Name
▦ tbl_doctor
▦ tbl_address

Used by

Name
▦ tbl_doctor
▦ tbl_operation

1.1.8.   Table: tbl_invoice
Invoice information of the patients.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for invoice records.
	visitid	nvarchar(10)		Foreign key to tbl_operation table.
	paymentmethodid	int		Foreign key to tbl_paymentmethod table.
	total	float		Total charge of the services.

Uses

Name
▦ tbl_invoice
▦ tbl_operation
▦ tbl_services
▦ tbl_paymentmethod

1.1.9. Tablo: tbl_neighbourhood
Neighbourhood information.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for neighbourhood records.
	name	nvarchar(50)		Name of the neighbourhoods.
	districtid	int		Foreign key to tbl_district tables.
	postalcode	int	N	Postal codes of the neighbourhoods.

Links to

	Table	Join	Title / Name / Description
⤙	tbl_district	tbl_neighbourhood.districtid = tbl_district.id	FK tbl_district_tbl_ neighbourhood _ districtid Foreign key constraint referencing tbl_district.id

Linked from

	Table	Join	Title / Name / Description
⤙	tbl_address	tbl_neighbourhood.id = tbl_address.neighbourhoodid	FK tbl_address_tbl_ neighbourhood _ neighbourhoodid Foreign key constraint referencing tbl_ neighbourhood.id

Uses

Name
▦ tbl_ neighbourhood
▦ tbl_district

Used by

Name
▦ tbl_ neighbourhood
▦ tbl_address

1.1.10.   Tablo: tbl_ongoing
Current information of ongoing processes.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key
	time	datetime		

Links to

	Table	Join	Title / Name / Description
⤡	tbl_operation	tbl_operation.id = tbl_ongoing.id	FK_ tbl_operation_tbl_ongoing_id Foreign key constraint referencing tbl_ongoing.id

Uses

Name
▦ tbl_ ongoing
▦ tbl_operation

1.1.11.   Table: tbl_operation
Table containing all the information about a doctor's examination.

Column

	Name	Data type	N	Description / Attributes
🔑	operationid	int		Primary key for operation records Identity / Auto increment column
	patientid	int		Primary key to tbl_patients table. Auto increment column.
	visitid	varchar(10)		Auto increment column.
	serviceid	int		Primary key to tbl_services table.
	processid	int		Primary key to tbl_process table.
	doctorid	int		Primary key to tbl_doctors table.
	departmentid	int		Primary key to tbl_department table.
	policlinicid	int		Primary key to tbl_policlinic table.
	parentid	int	N	Primary key to tbl_parents table. Auto increment column.

Links to

	Table	Join	Title / Name / Description
✈	tbl_patients	tbl_patients.patientid = tbl_operation.patientid	FK_tbl_patients.patientid Foreign key constraint referencing tbl_operation.patientid
✈	tbl_services	tbl_operation.serviceid = tbl_services.id	FK_ tbl_services.id Foreign key constraint referencing tbl_operation.serviceid
✈	tbl_process	tbl_operation.processid = tbl_process.id	FK_ tbl_process.id Foreign key constraint referencing tbl_operation.processid
✈	tbl_doctors	tbl_operation.doctorid = tbl_doctors.id	FK_ tbl_doctors.id Foreign key constraint referencing tbl_operation.doctorid
✈	tbl_departments	tbl_operation.departmentid = tbl_departments.id	FK_ tbl_departments.id Foreign key constraint referencing tbl_operation.departmentid
✈	tbl_policlinic	tbl_operation. policlinicid = tbl_policlinic.id	FK_ tbl_policlinic.id Foreign key constraint referencing tbl_operation.policlinicid
✈	tbl_parents	tbl_operation.parentid = tbl_parents.id	FK_ tbl_parents.id Foreign key constraint referencing tbl_operation.parentid

Linked from

	Table	Join	Title / Name / Description
✦	tbl_checkin	tbl_operation. operationid = tbl_checkin.id	FK_ tbl_checkin.id Foreign key constraint referencing tbl_operation. operationid
✦	tbl_completed	tbl_operation. operationid = tbl_completed.id	FK_ tbl_operation.operationid Foreign key constraint referencing tbl_operation.operationid

⤙	tbl_ongoing	tbl_operation.id=tbl_ongoing. operationid	FK_ tbl_operation.id Foreign key constraint referencing tbl_ongoing.operationid
⤙	tbl_invoice	tbl_operation. visitid = tbl_invoice.visitid	FK_ tbl_invoice._tbl_operation_visitid Foreign key constraint referencing tbl_operation.visitid

Uses

Name
▦ tbl_ operation
▦ tbl_patients
▦ tbl_services
▦ tbl_process
▦ tbl_doctors
▦ tbl_departments
▦ tbl_policlinic
▦ tbl_parents

Used by

Name
▦ tbl_ operation
▦ tbl_checkin
▦ tbl_completed
▦ tbl_ongoing
▦ tbl_invoice

1.1.12. Tablo: tbl_parents
Parents' information.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for service records. Identity / Auto increment column.
	name	nvarchar(30)		Name of parents.
	surname	nvarchar(50)		Surname of parents.
	phone	varchar(15)	N	Phone number of parents.
	identitynumber	nvarchar(11)	N	Identity number of parents.
	relationship	nvarchar(50)	N	Relationship of parents with patients.

Linked from

Table	Join	Title / Name / Description
tbl_operation	tbl_ parents.id = tbl_operation.parentid	FK_ tbl_ operation_tbl_parents_parentid Foreign key constraint referencing tbl_parents.id

Used by

Name
▦ tbl_parents
▦ tbl_operation

1.1.13. Tablo: tbl_patients

Patient's information.

Column

Name	Data type	N	Description / Attributes
🔑 id	int		Primary key for patient records.
identitynumber	nvarchar(11)		İdentity numbers of the patients.
name	nvarchar(30)		Name of the patients.
surname	nvarchar(30)		Surname of the patients.
gender	nchar(6)		Gender of the patients.
age	float	N	Age of the patients.
birthdate	date	N	Birth date of the patients.
bloodtypeid	int	N	Blood group id of patients.
adressid	int	N	Patients associated with this address.
lastvisitasdays	int	N	Number of days since the patient' last visit.

Links to

	Table	Join	Title / Name / Description
⤚	tbl_bloodgroups	tbl_ patients.bloodtypeid = tbl_bloodgroups.id	FK_ tbl_ patients_tbl_bloodgroups_bloodtypeid Foreign key constraint referencing tbl_bloodgroups.id
⤚	tbl_address	tbl_patients.addressid = tbl_address.id	FK_tbl_patients_tbl_address_addressid Foreign key constraint referencing tbl_address.id

Uses

Name
▦ tbl_patients
▦ tbl_bloodgroups
▦ tbl_address
▦ tbl_completed

1.1.14.   Tablo: tbl_paymentmethod
Information about payment method of the patients.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for payment method records.
	type	nvarchar(30)		Name of payment method.

Linked from

	Table	Join	Title / Name / Description
⤙	tbl_invoice	tbl_ paymentmethod.id = tbl_invoice.paymentmethodid	FK_tbl_invoice_tbl_paymentmethod_paymentmethodid Foreign key constraint referencing tbl_paymentmethod.id

Name
⊞ tbl_paymentmethod
⊞ tbl_invoice

1.1.15. Table: tbl_policlinic
Information of policlinics.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for policlinic records.
	name	nvarchar(50)		

Linked from

	Table	Join	Title / Name / Description
⊰	tbl_operation	tbl_ policlinic.id = tbl_operation.policlinicid	FK_ tbl_operation_tbl_policlinic_policlinicid Foreign key constraint referencing tbl_policlinic.id

Used by

Name
⊞ tbl_policlinic
⊞ tbl_operation

1.1.16. Tablo: tbl_process
Process information.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for process records.
	name	nvarchar(15)		Name of process.

	Table	Join	Title / Name / Description
⊰	tbl_operation	tbl_ process.id = tbl_operation.processid	FK_ tbl_operation_tbl_process_processid Foreign key constraint referencing tbl_process.id

Used by

Name
▦ tbl_process
▦ tbl_operation

1.1.17.   Tablo: tbl_services
Information of services.

Column

	Name	Data type	N	Description / Attributes
🔑	id	int		Primary key for service records.
	name	nvarchar(255)		Name of services.
	price	float		Price of services.

Linked from

	Table	Join	Title / Name / Description
⊰	tbl_operation	tbl_ services.id = tbl_operation.serviceid	FK_ tbl_operation_tbl_services_serviceid Foreign key constraint referencing tbl_services.id

Used by

Name
▦ tbl_services
▦ tbl_operation

1.2. Views

1.2.1.   View: view_operationcountbypoliclinic
Poliklinik bazında bakılan hasta sayısı.

	Name	Data type	N	Description / Attributes
	poliklinik bazında işlem sayısı (operationid)	int		
	poliklinik isimleri (policlinic_name)	nvarchar(255)	*N*	

1.2.2.   View: view_operationcountbyservice

Servis bazında işlem sayılarını gösterir.

	Name	Data type	N	Description / Attributes
	servis bazında işlem sayısı (operationid)	int		
	servis (services.name)	nvarchar(255)	*N*	

1.3. Procedures

1.3.1.   Procedure: sp_insertpatient

Takes patient information and inserts to tbl_patient table.

	Table	Join	Title / Name / Description
⇥@	patientidno	nvarchar(11)	Citizenship number of patient
⇥@	name	nvarchar(30)	Name of patient
⇥@	surname	nvarchar(30)	Surname of patient
⇥@	gender	nchar(10)	Gender of patient
⇥@	birthdate	date	Birthdate of patient
⇥@	adressid	int	Id of the patient's adress

1.3.2.   Procedure: sp_insertoperation

Takes patient information and operation information. If patient doesn't exist at the patients table with given pidnumber. Inserts the patient then inserts operation. If the patient exists passes the patient insert section and directly inserts the operation.

	Table	Join	Title / Name / Description
⇥@	pidnumber	nvarchar(11)	Citizenship number of patient
⇥@	name	nvarchar(30)	Name of patient
⇥@	surname	nvarchar(30)	Surname of patient

▸@	gender	nchar(10)	Gender of patient
▸@	birthdate	date	Birthdate of patient
▸@	adressid	int	Id of the patient's adress
▸@	serviceid	int	Id of the given service
▸@	processid	int	Process id of the operation
▸@	doctorid	int	Id of the doctor
▸@	departmentid	int	Id of the department
▸@	policlinicid	int	Id of the policlinic

1.3.3. Procedure: sp_update_lastvisit

Updates all patients' lastvisitasdays column. Finds the date a patient last visited the hospital then compares it with today's date. Then updates the related column.

Backup Strategies

The backup strategy is determined to taking the risk of 5 minutes data loss. According to the plan the execution period of backups are given below.

- Full Backup : Everyday (Starting 05:00)
- Differential Backup : Every 30 minutes
- Transactional log backup : Every 5 minutes