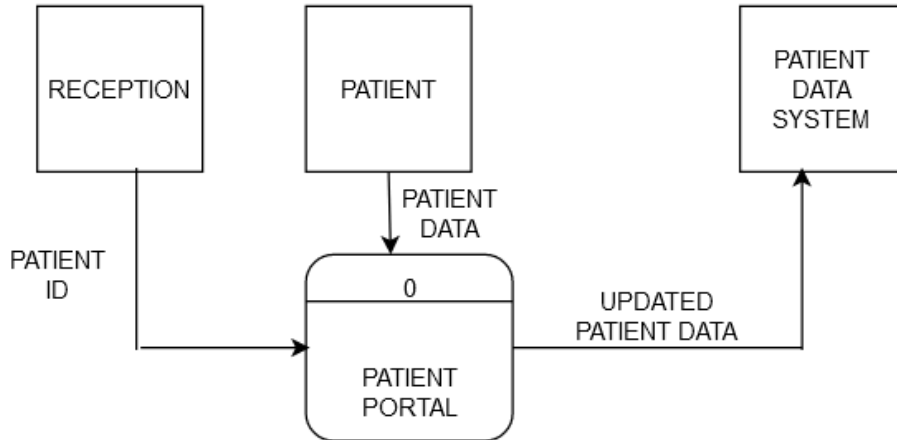


# CMSC243: Systems Analysis and Design

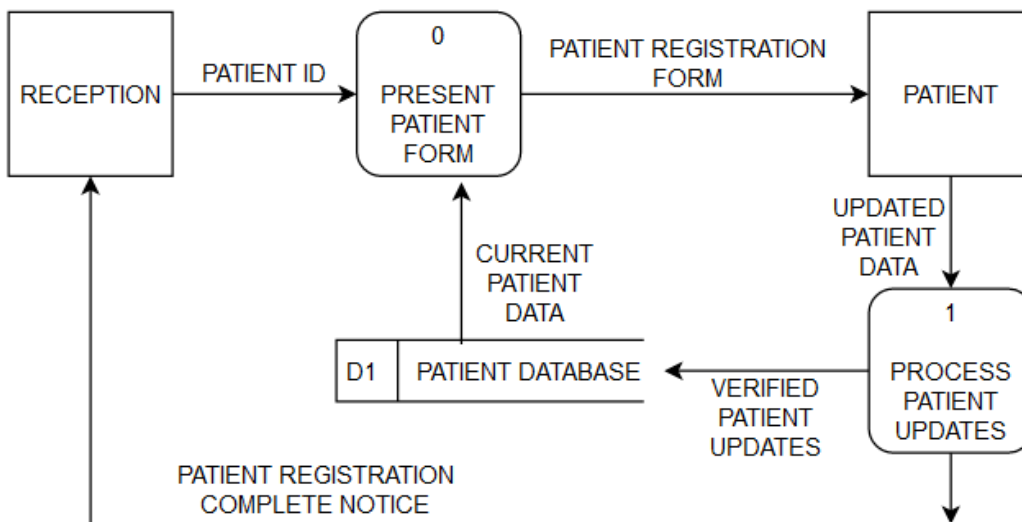
## Assignment 5: Context Diagram, Diagram 0 DFD, Data Dictionary

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### Task 1: Context Diagram.



### Task 2: Diagram 0 DFD.



### Task 3: Data Dictionary.

#### Data Elements

- **Date:** All dates are stored as YYYYMMDD.
- **Family:** A group of people living at the same address who consider themselves a family. The family ID is email address of the first person in the family to become a patient.
- **Name:** all names are stored in the format Last,First optional, Examples: Banks,Robin III, Adams,Stacy
- **Patient:** any person who enters our practice. The patient ID is First 3 letters of the last name, followed by the first 3 letters of the first name and the date of birth. Example: BANROB19800230 for Robin Banks born 2/30/1980. If either name has fewer than 3 letters fill with X. Example: Li,Paul born 5/21/1976 id is LIXPAU19760521
- **Form:** Any document either electronic or printed that is filled out by the patient.

## Data Flows

- **PATIENT ID:** Reception looks up patient id using name and date of birth. This id is used to initialize the form for the patient.
- **CURRENT PATIENT DATA:** The forms are filled with the patient's current information for the patient to verify and or update.
- **PATIENT REGISTRATION FORM:** The form is presented to the patient in stages, skipping parts that do not apply. Form is filled out with the current data for the patient to edit and verify.
- **UPDATED PATIENT DATA:** After the patient completes the form, the updated data is transmitted for processing.
- **VERIFIED PATIENT DATA:** The data submitted by the patient is checked for completeness and validity. The verified changes are entered in the patient database.
- **PATIENT REGISTRATION COMPLETE NOTICE:** After the patient has completed the form, and the updates made to the patient database, reception is notified that the patient has completed the form.

## Data Stores

- **PATIENT DATABASE:** The patient database is part of the overall system. It contains all patient submitted data, including Patient ID, contact information, Family ID, prescriptions and supplements, as well as records of each appointment, vaccines, treatments and physician notes.

## Processes

- **0 PRESENT PATIENT FORM:** Receives the patient ID and presents the form to the patient in stages, skipping parts that do not apply. Form is filled out with the current data for the patient to edit and verify.
- **1 PROCESS PATIENT UPDATES:** Data submitted for update is checked for validity and completeness.