Mountain View Community Hospital

DBMS Report – April 2016

System Requirements/Problem Definition

- Support for recording and reporting medical procedure results.
- On-line processing.
- Revenue by cost department tracking/reporting.
- Support for future changes and expansion.
- Retain previous system functionality.

- **Mission Statement:**
- This new proposed system for MVCH will replicate the operations of the previous system while expanding the capabilities to allow instant custom data entry and retrieval, management of specific resources, the creation of flexible reports, and room for future scalability.
- This system will be a relational database management system developed through the standard DBLC.
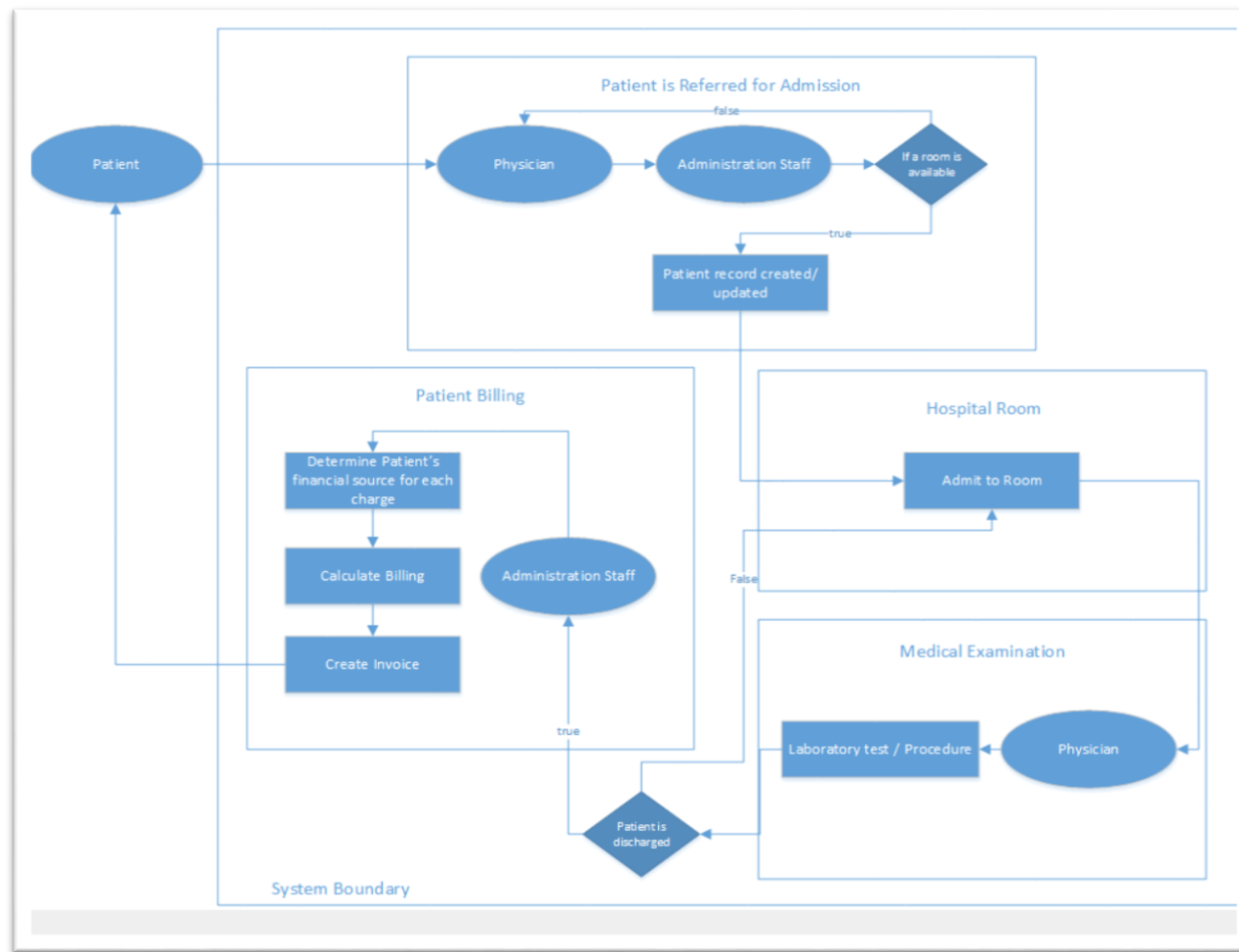
System Boundary

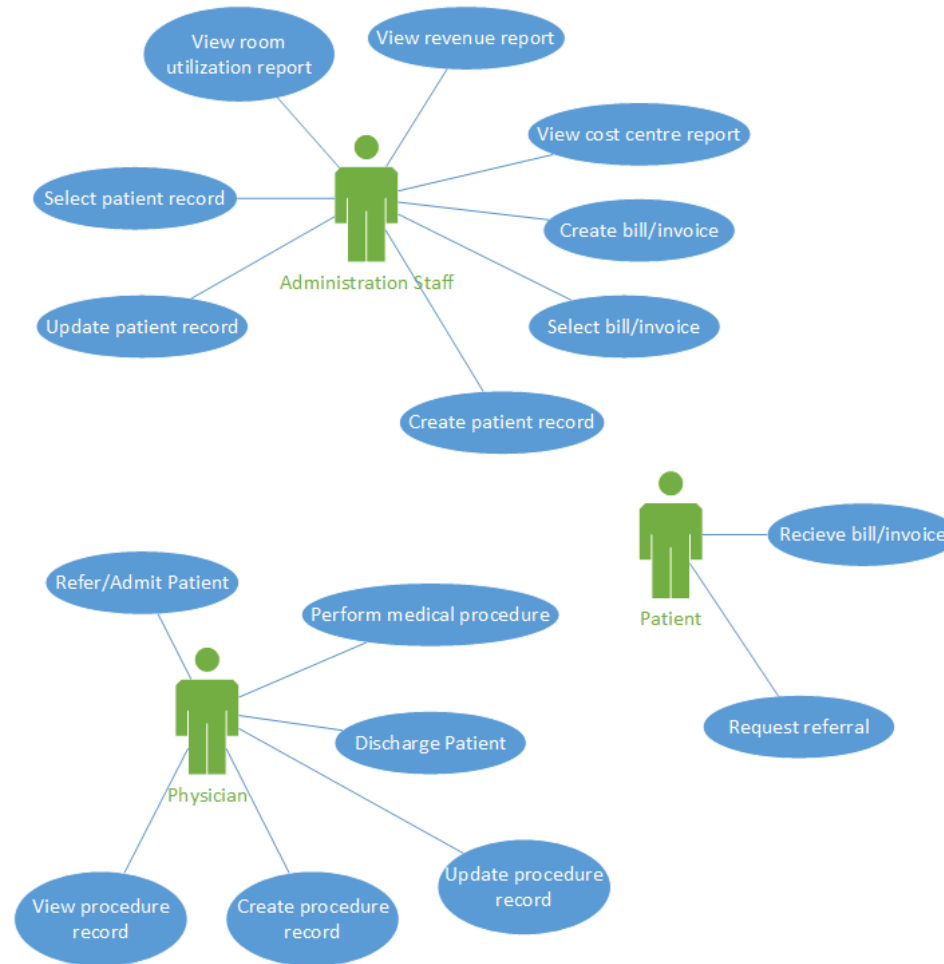This diagram depicts the process of patient admission through physician referral.
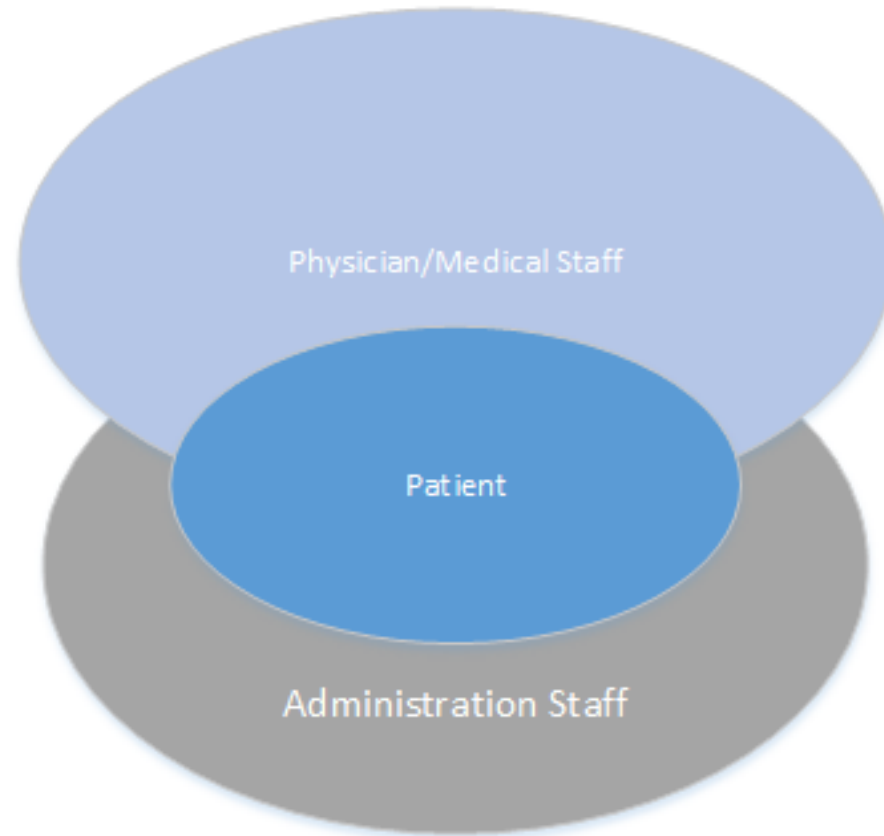
Use Case

The diagrams depict the process that each of the main actors can perform within this system.

Physician – referral and discharge of patients, medical records.

Administration – Billing, revenue reports, and patient records.

Patients – Receive billing records and request referral.

User Views

This diagram depicts the restriction of data based on actor type within the system. Medical staff will have access to patient records excluding billing and access to procedure records. Administration staff will have access to billing, revenue, and patient records excluding specific medical information.

Tables and attributes

▶ PATIENTS   <u>PATIENT_ID</u>, PATIENT_NAME, PATIENT_ADDRESS, PATIENT_CITY, PATIENT_PROV, PATIENT_POSTAL_CODE, PATIENT_PHONE_NUMBER, GENDER, HCN, FINANCIAL_STATUS

▶ LOCATION_ADMITTED   <u>PATIENT_ID</u>, <u>LOCATION_ID</u>, <u>DATE_ADMITTED</u>, <u>BILL_ID</u>, DISCHARGE_DATE

▶ PHYSICIANS   <u>PHYSICIAN_ID</u>, PHYSICIAN_NAME, PHYSICIAN_PHONE_NUMBER, SPECIALTY

▶ PATIENTS_REFERRED   <u>PHYSICAN_ID</u>, <u>PATIENT_ID</u>,

▶ ROOMS   <u>LOCATION_ID</u>, ROOM_TYPE, EXTENSION

▶ PATIENT_BILLS   <u>BILL_ID</u>, BILL_DATE, BALANCE_DUE

▶ SERVICES_CHARGED   <u>BILL_ID</u>, <u>ITEM_ID</u>, <u>DATE_CHARGED</u>, QUANTITY, FINANCIAL_SOURCE

▶ ITEMS   <u>ITEM_ID</u>, <u>COST_CENTRE_ID</u>, ITEM_DESCRIPTION, ITEM_CHARGE

▶ COST_CENTRE   <u>COST_CENTRE_ID</u>, COST_CENTRE_NAME

Sample Reports

Mountain View Community Hospital - Patient/Physician Report 4/13/2016

	Physician Name	Specialty	Patient ID	location ID	Date Admitted	Discharge Date
12341	Tanisha Robinson	Neurosurgery				
			12345	100A	1/1/2016 12:00:00AM	1/2/2016 12:00:00AM
			12346	100A	1/2/2016 12:00:00AM	
			12361	105	1/1/2016 12:00:00AM	
12343	Deanna Kerr	Plastic surgery				
			12349	100A	3/22/2016 12:00:00AM	3/25/2016 12:00:00AM
12344	Hyacinth Burton	General practitione				
			12353	106B	1/5/2016 12:00:00AM	1/10/2016 12:00:00AM
12345	Beck Shannon	General practitione				
			12356	107A	6/2/2016 12:00:00AM	
12347	Regina Weeks	Ophthalmology				
			12341	109C	10/28/2016 12:00:00A	11/3/2016 12:00:00AM
12348	Debra Flynn	Pediatrics				
			12359	101B	4/1/2016 12:00:00AM	6/20/2016 12:00:00AM
			12362	110	1/20/2016 12:00:00AM	1/21/2016 12:00:00AM
12353	MacKensie Caldwell	Anesthesiologist				
			12353	106B	1/5/2016 12:00:00AM	1/10/2016 12:00:00AM
12354	Lillian Mcknight	General practitione				
			12358	106A	1/4/2016 12:00:00AM	

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Sample Reports (cont'd)