

August 21, 2025

RE: Shadowing, Scribing & Volunteering Experience of Shivam Gupta

- **Total Hours Earned:** 694 hours
- **Dates:** May 21, 2023 – August 20, 2025
- **Experience Breakdown with Hours:**
 - **Shadowing** – 492 hours
 - **Scribing** – 151 hours
 - **Hospital Volunteering** – 51 hours

a) Non-exhaustive list of Shadowing & Observing experience at the HCA hospital with the rounding attendings and in clinics:

- Observed thorough patient history and comprehensive physical examinations in clinic and hospital, including emergency department
- Multidisciplinary rounds across the stroke, medical/surgical, cardiac, and observation units
- EMR navigation and documentation done by medical staff
- Presenting the patients to doctors by residents during rounds
- Clinical examinations, assessment and management plans of 3–4 patients daily during post-round huddles
- Interpreting diagnostic studies, and differential diagnoses and treatment plans
- Discharge coordination, including medication reconciliation and follow-up planning
- Handling of responsibilities across different stages of patient care structured SOAP documentation and order placement
- Effective coordination of nurses, pharmacists, staff physicians and residents
- Clinical discussions to formulate differential diagnoses and management plans
- Observed conducting histories, physical examinations, pre-rounding activities with physicians & residents, and formulating assessments and differential diagnoses during team rounds.
- Took initiative in shadowing residents during rapid response calls, which enhanced his exposure to urgent care and interdisciplinary teamwork
- Observed discussing code status with patients
- Observed patient evaluations, case presentations, and multidisciplinary discussions
- Discussions about diagnostic reasoning, interpretation of EKGs during didactics, and clinical reasoning
- Observed reviewing patient charts, interpreting laboratory and imaging results, progression of disease discussion and management plans with the team
- Observed a wide spectrum of clinical activities - daily rounds, case presentations, obtaining patient histories, and participation in meaningful case-based discussions

- Attended educational conferences
- Observed in diverse clinical settings, including the ICU and emergency care units
- Observed cross-coverage and hospital admissions of patients
- Observed formulation of differential diagnoses and management strategies, review of imaging and laboratory data with accuracy
- Observed discharge planning, bedside rounds and afternoon educational sessions
- Observed practice-based learning and systems-based practice
- Observed referencing current guidelines during clinical discussions and applying them thoughtfully to patient care
- Observed medical records review process, progress, and treatment discussions
- Learned to distill complex narratives into concise notes—translating a patient's vague abdominal pain into targeted differentials like appendicitis or cholecystitis. Scribing hones medical terminology and billing codes, crucial for navigating the U.S. healthcare system's administrative labyrinth
- Observed taking comprehensive patient histories, reviewing charts, and presenting cases to the attending team. Observed discussions regarding assessment and management plans

b) Partial list of Shadowing & Observing experience of typical medical cases at the HCA hospital & clinic:

- Management of complex clinical scenarios, including patients with sepsis, respiratory failure, and challenging cases requiring careful distinction between infection and malignancy
- Wide variety of cases, including cardiovascular disease, renal failure, sepsis, diabetes complications, and neurologic emergencies, and consistently deepened her knowledge through independent study and team discussions
- Broad spectrum of cases, including congestive heart failure, COPD, chronic kidney disease, atrial fibrillation, pneumonia, diabetes, and hypertension
- High-acuity inpatient population, primarily elderly patients with multiple comorbidities such as cardiovascular, renal, endocrine, and neurologic disorders
- Patients in both ICU and general medicine wards, detailed patient histories, physical examinations, MedTech EMR system, observed transition-of-care operations, including hospice, skilled nursing, and long-term care planning
- Diagnosis and treatment of a young patient with traumatic brain injury
- Patient cases involving acute dyspnea due to undiagnosed atrial fibrillation
- Observed cases involving patients with autoimmune disorders and others frequently encountered internal medicine conditions
- Case of an elderly woman with altered mental status due to a complicated urinary tract infection and care plan to the patient's family
- Observed a diagnosis of congestive heart failure unfold: the doctor elicited a detailed history, interpreted subtle signs like jugular venous distension, and collaborated with nurses on a diuretic regimen.

- Gained exposure to inpatient cases such as hypertension and diabetes management and observed how to apply evidence-based medicine while tailoring care to patients with multiple comorbidities.
- Shadowed and gained insight into the management of patients with intractable abdominal pain secondary to metastasis
- Shadowed on patients having multiple comorbidities, including anemia and colitis.

c) Summarized Scribing experiences at the HCA hospital & clinic:

Documenting Patient Encounters:

- Recorded patient history, chief complaints, medical history, and symptoms, during the visit
- Documented physical examination findings as described by the healthcare provider
- Noted details of procedures, tests, or treatments performed during the visit

Real-Time Charting:

- Entered information into EHR systems soon after patient interactions
- Ensured accurate coding for diagnoses, procedures, and billing purposes (e.g., ICD-10, CPT codes)

Assisting Providers During Visits:

- Transcribed verbal orders, clinical observations, and instructions from healthcare providers
- Prepared and organized patient charts or records before visits to streamline provider workflow

Managing Clinical Documentation:

- Drafted progress notes, discharge summaries, or referral letters based on provider input
- Updated patient records with lab results, imaging reports, or consultation notes

Facilitating Communication:

- Relayed information between healthcare providers, nurses, or other staff, as needed
- Coordinated with ancillary services (e.g., labs, radiology) ensuring timely documentation of results

Ensuring Compliance and Accuracy:

- Verified patient information, including demographics and insurance details, for accuracy
- Adhered to HIPAA regulations and maintained patient confidentiality in all documentation
- Reviewed notes for completeness, clarity, and compliance with medical standards before final submission

Supporting Workflow Efficiency:

- Managed appointment schedules by documenting time-sensitive information or follow-up instructions
- Assisted with pre-visit preparations, such as pulling relevant patient history or lab results

Specialized Tasks (Depending on Setting):

- In emergency departments, documented urgent care details, such as trauma assessments or acute interventions
- In clinics, recorded preventive care measures, vaccinations, or chronic disease management plans
- In surgical settings, noted operative details or post-operative care instructions

d) Observed conditions and procedures, and concepts learnt while shadowing the following medical specialty doctors:

Dr. Maher Dahdel (*Pulmonologist & Associate Program Director*)

Clinical Procedures & Observations:

- **Chest Tube Placement:** A flexible tube inserted between the ribs into the pleural space to drain air, blood, or fluid. It's used in conditions like pneumothorax (collapsed lung), hemothorax (blood accumulation), and pleural effusion
- **Tracheostomy:** A surgically created hole in the windpipe (trachea) that allows a tube to bypass the mouth and nose, enabling long-term ventilation or emergency airway access
- **Bronchoscopy:** A procedure using a thin tube with a camera (bronchoscope) inserted through the nose or mouth to examine the airways and collect samples
- **Thoracentesis:** A needle is inserted into the pleural space to remove excess fluid, often in patients with pleural effusion or lung cancer
- **Duoneb Treatment:** A nebulized solution combining albuterol and ipratropium, used to relax airway muscles and improve breathing in COPD or asthma patients
- **Spirometry:** A test that measures how much air a person can inhale and exhale, and how fast, to assess conditions like asthma or pulmonary fibrosis
- **Pulmonary Function Tests (PFTs):** A series of breathing tests to evaluate lung volume, capacity, and airflow
- **Ventilator Use:** Observed how mechanical ventilators support or replace spontaneous breathing in patients with respiratory failure
- **Chest X-rays & CT scans:** Learned to interpret imaging for signs of pneumonia, fluid buildup, fibrosis, or tumors. CT (Computed Tomography) provides more detailed cross-sectional images, including brain structures like gray and white matter

Conditions Observed:

- **Pulmonary Fibrosis:** Scarring of lung tissue leading to breathing difficulties and decreased oxygen exchange
- **Acute Hypoxic Respiratory Failure:** When lungs fail to deliver enough oxygen to the blood, it often requires mechanical ventilation
- **Pleural Effusion:** Accumulation of fluid between lungs and chest wall; causes shortness of breath and requires drainage
- **Bronchitis/Bronchiolitis:** Inflammation of the bronchial tubes, commonly viral; in children, bronchiolitis affects smaller airways
- **Pneumonia:** Infection of the lung parenchyma causing fever, cough, and difficulty breathing.

- **Leukocytosis:** Elevated white blood cell count, typically a response to infection or inflammation

Dr. Omar Jeroudi (*Interventional Cardiologist & Medical Director*)

Procedures Observed:

- **Cardiac Catheterization (Heart Cath):** A thin tube is inserted into a blood vessel and guided to the heart to evaluate blockages and perform interventions
- **Angiogram:** An imaging test using dye to view blood flow through arteries and detect blockages
- **Angioplasty with/without Stent Placement:** A balloon-tipped catheter is used to open narrowed arteries; a stent (mesh tube) may be placed to keep them open
- **TAVR (*Transcatheter Aortic Valve Replacement*):** A minimally invasive procedure to replace a diseased aortic valve, typically for patients with aortic stenosis
- **Two-lead Defibrillator Pacemaker:** A device implanted under the skin to correct abnormal heart rhythms by sending electrical impulses to both ventricles
- **Echocardiogram:** An ultrasound of the heart that shows chamber size, valve function, and ejection fraction (percentage of blood pumped with each beat)
- **Treadmill and Nuclear Stress Tests:** Assesses how well the heart handles physical stress; nuclear variant uses radioactive dye and a special camera to visualize blood flow
- **Telemetry:** Continuous, remote ECG monitoring system that tracks heart rhythm, oxygen saturation, and respiration in hospitalized patients

Conditions & Concepts:

- **Atrial Fibrillation (AFib):** A common arrhythmia where the atria beat irregularly, increasing stroke risk due to potential clot formation
- **Premature Ventricular Contractions (PVCs):** Extra, abnormal heartbeats that start in the ventricles. May feel like a skipped beat or flutter
- **Aortic Valve Stenosis:** A narrowing of the heart's aortic valve, obstructing blood flow from the heart to the body
- **Ejection Fraction:** A measurement of how well the heart pumps with each beat. Normal is $\geq 55\%$; lower values indicate heart failure
- **Orthopnea:** Difficulty breathing when lying flat, often seen in heart failure
- **Bilateral Edema:** Swelling in both legs or feet, usually from poor circulation or congestive heart failure
- **Conduction System Disease:** Problems with the heart's electrical pathways, which may cause bradycardia or tachycardia
- **Hyperlipidemia (HLD):** High levels of cholesterol or fats in the blood; increases the risk of heart disease
- **Diabetes Mellitus:** A chronic metabolic disorder characterized by high blood sugar levels due to insulin deficiency or resistance
- **Lasix (*Furosemide*):** A diuretic medication used to treat fluid retention (edema) by helping the body eliminate excess salt and water

Dr. Sidhartha Acharya (Cardiologist)

Hands-On Experiences:

- Blood Pressure Cuff Use: Learned correct technique for manual and digital BP readings; understood systolic/diastolic values
- EKG Application: Placed electrode pads and leads; ran and printed ECGs

EKG Interpretation Basics:

- P wave: Atrial contraction
- QRS Complex: Ventricular contraction
- T wave: Ventricular repolarization
- PACs vs. PVCs: Compared atrial and ventricular extra beats; noted when they require medical attention
- Heart Patches: Continuous ECG recording devices used for detecting intermittent arrhythmias over 24–72 hours

Clinical Applications:

- Observed that EKGs are essential for chest pain evaluation and pre-operative assessments
- Accurately transcribed physician progress notes into the electronic medical record (EMR), incorporating patient vital signs, laboratory results, and clinical assessments

Dr. Kodlipet Dharmashankar (Cardiologist)

Conditions Observed:

- **Atrial Fibrillation (AFib):** An irregular, often rapid heartbeat that starts in the atria and increases the risk of stroke and blood clots
- **Congestive Heart Failure (CHF):** A chronic condition where the heart can't pump blood efficiently, leading to fluid buildup in the lungs, legs, and abdomen

Diagnostic Procedures

- **Exercise Stress Test:** Evaluates heart function under physical activity to detect blocked arteries or abnormal rhythms
- **Nuclear Stress Test:** Uses a radioactive tracer and imaging to assess blood flow to the heart during stress or rest
- **Echocardiogram:** An ultrasound of the heart that shows chamber size, valve function, and how well the heart pumps
- **Heart Catheterization:** A thin tube is guided to the heart to visualize blocked arteries and measure pressures inside the heart

Concepts Learned

Cholesterol:

- **LDL (Low-Density Lipoprotein):** "Bad" cholesterol that causes plaque buildup in arteries
- **HDL (High-Density Lipoprotein):** "Good" cholesterol that helps clear LDL from the bloodstream

- **Triglycerides:** A type of fat in the blood that rises with obesity or a high-sugar diet and raises the risk of heart disease
- Accurately transcribed physician progress notes into the electronic medical record (EMR), incorporating patient vital signs, laboratory results, and clinical assessments

e) Key Takeaways from Shadowing and Observing experience under the mentorship of the following healthcare professionals:

Dr. Mohan Kumar (*Cardiologist*)

- Observed the interpretation of echocardiograms to detect wall motion abnormalities following myocardial infarction
- Gained insight into how stress tests and cardiac imaging help assess lingering ischemia after stent placement
- Discussions centered around secondary prevention, emphasizing smoking cessation, statins, and long-term follow-up
- Became familiar with the pharmacologic regimen used after heart attacks, including dual antiplatelet therapy, beta-blockers, and statins
- Recognized how follow-up evaluations use troponin levels and EKG changes to monitor cardiac recovery

Dr. Rashid Haroonur (*Cardiologist*)

- He was introduced to the physical and clinical presentation of congestive heart failure, including signs like rale, edema, and jugular venous distension
- Discussed the use of ACE inhibitors to reduce vascular resistance and prevent adverse cardiac remodeling
- Observed how beta-blockers are titrated to reduce heart rate and improve ejection fraction
- Noted the impact of loop diuretics in alleviating symptoms of volume overload, especially pulmonary congestion
- Reviewed strategies for managing CHF at home, including daily weights, fluid restrictions, and patient education

Dr. Mehdi Razvi (*Electrophysiologist*)

- Observed device interrogations for pacemakers and ICDs, including the fine-tuning of electrical settings based on patient-specific data
- Developed an understanding of how rhythm abnormalities such as atrial fibrillation and ventricular tachycardia are detected through EKG analysis
- Gained exposure to the use of Holter monitors and loop recorders for diagnosing intermittent arrhythmias
- Explored the CHA₂DS₂-VASc scoring system used to estimate stroke risk and guide anticoagulant therapy
- Reviewed the indications and outcomes of catheter ablation as a treatment for refractory arrhythmias

Dr. Manish Rungta (*Gastroenterologist*)

- Witnessed the use of upper endoscopy to visualize esophageal and gastric pathology, including ulcers and varices
- Observed how colonoscopies are performed to identify polyps, inflammation, and potential malignancies
- Sat in on an ERCP procedure, where fluoroscopic guidance was used to treat biliary obstruction
- Learned how paracentesis is performed to remove ascitic fluid in patients with cirrhosis
- Reviewed liver function tests (e.g., bilirubin, INR, albumin) and how they inform prognosis and treatment in chronic liver disease

Dr. Vikas Jogi (*Infectious Disease Specialist*)

- Participated in rounds that addressed elevated white blood cell counts, fevers, and septic presentations
- Observed how empiric antibiotics are selected and how culture results are used to tailor treatment
- Discussed hospital-acquired vs. community-acquired infections and the challenges of managing drug resistance
- Gained exposure to the principles of antibiotic stewardship, especially in immunocompromised patients
- Watched the interpretation of infectious markers like procalcitonin and CRP to track clinical progress

Dr. Robert Dewitt (*Primary Care Physician*)

- Assisted in collecting vital signs and performing EKGs in a primary care clinic setting
- Became familiar with the role of routine blood tests (lipid panels, A1c, renal function) in managing conditions like diabetes and hypertension
- Transcribed visit summaries into the EHR, improving understanding of clinical documentation and workflow
- Observed how long-term relationships between physicians and patients improve compliance and health outcomes
- Saw the importance of preventive screenings and how these are discussed during wellness visits

Dr. Nehme Alkarra (*Internal Medicine / Primary Care*)

- Shadowed management of patients with multiple comorbidities, including diabetes, hypertension, and early-stage CKD
- Observed how medication regimens are adjusted based on lab trends and patient lifestyle factors
- Observed patient education in action, particularly when explaining lab results or imaging findings

- Noted how evidence-based guidelines are tailored to meet the unique needs of individual patients
- Observed how routine follow-ups help detect silent disease progression and prevent complications

Dr. Krista Johnson (*Hospitalist - Internal Medicine*)

- Attended daily rounds, where updates from labs, imaging, and nursing staff were integrated into medical decisions
- Observed acute care management of patients with pneumonia, UTIs, and electrolyte disturbances
- Learned how hospitalists coordinate care with consulting specialists and discharge planners
- Was present during code status discussions, gaining perspective on ethics and patient autonomy
- Noted how efficient documentation and progress notes support continuity of care within the hospital team

Dr. Sidharth Ghosh (*Hospitalist - Internal Medicine*)

- Followed patients with overlapping conditions such as congestive heart failure and kidney dysfunction
- Observed how physicians determine treatment priorities when patients present with several simultaneous issues
- Reviewed the use of oxygen therapy, IV fluids, and electrolyte repletion in stabilizing acutely ill individuals
- Participated in discussions about rehabilitation placement and transitions to skilled nursing facilities

Dr. Nadia Niazi (*Hospitalist - Internal Medicine*)

- Observed patient presentations involving altered mental status, CHF exacerbations, and AKI
- Noted how clinical trends (such as lab improvement or oxygen demand) are used to track patient progress
- Reviewed how discharge plans are created with attention to home safety, follow-up care, and medication access
- Gained insight into how hospitalists tailor treatment for older adults with polypharmacy and multiple diagnoses
- Saw the importance of daily reassessment, especially in patients with unstable conditions

Dr. Mahendra Agrahakar (*Nephrologist*)

- Reviewed creatinine, GFR, BUN, and electrolytes as markers of kidney function and disease progression
- Observed how kidney disease is managed through dietary control, blood pressure regulation, and medication adjustment

- Saw patients undergoing hemodialysis, with explanations of how fluid and electrolyte balance is restored
- Compared modalities of hemodialysis vs. peritoneal dialysis, including indications and patient suitability
- Learned how renal dysfunction impacts other systems, particularly the cardiovascular and endocrine systems

Dr. Imtiaz Ahmed (*Intensivist - ICU*)

- Witnessed real-time adjustments to mechanical ventilation settings, including PEEP, tidal volume, and oxygen delivery
- Observed emergency intubations and tracheostomies for patients in respiratory failure
- Participated in bedside assessments of patients with septic shock, ARDS, and multi-organ failure
- Saw how ICU teams interpret ABGs, fluid status, and hemodynamic data minute-by-minute.
- Gained exposure to the level of interdisciplinary collaboration necessary to keep critically ill patients stable



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