CONFIDENTIAL PATIENT MASTER RECORD

PATIENT ID: 215 | MRN: MRN-215-2025

I. REGISTRATION FACE SHEET

PATIENT IDENTITY	
Name:	Minerva McGonagall
DOB:	1945-10-04
Gender:	female
Race:	Caucasian
Height:	5 ft 6 in
Weight:	145 lbs
Telecom:	857-555-1945
Address:	4 Griffin Way, Boston, MA 02114
Marital Status:	Widowed
Multiple Birth:	No (Order: 1)

COMMUNICATION	
Language:	English
Preferred:	Yes

EMERGENCY CONTACT	
Relationship:	Friend and former colleague
Name:	Albus Dumbledore
Telecom:	857-555-1000
Address:	1 Hogwarts Castle, Boston, MA 02114
Gender:	male
Organization:	Hogwarts Medical Center
Period Start:	1975-09-01
Period End:	ongoing

PRIMARY PROVIDER	
General Practitioner:	Dr. Pomona Sprout, MD
Managing Organization:	Hogwarts Medical Center

INSURANCE / PAYER	
Payer ID:	J1113
Payer Name:	Medicare
Plan Name:	Medicare Part B

Plan Type:	Medicare
Group ID:	N/A
Group Name:	N/A
Member ID:	1A45B81C9D2
Policy Number:	1A45B81C9D2
Effective Date:	1990-07-01
Termination Date:	ongoing
Copay:	$0
Deductible:	$240
SUBSCRIBER	
Subscriber ID:	1A45B81C9D2
Subscriber Name:	Minerva McGonagall
Relationship:	Self
Subscriber DOB:	1945-10-04
Subscriber Address:	4 Griffin Way, Boston, MA 02114

II. MEDICAL BIOGRAPHY & HISTORY

Minerva McGonagall is a 79-year-old retired university professor with a sharp intellect and a no-nonsense demeanor. She has a history of hypertension and hyperlipidemia, managed for years by her primary care physician. She lives independently and prides herself on her resilience and discipline, qualities she honed during her long and distinguished academic career.

Over the last six months, she began experiencing a gradual decline in her physical stamina, marked by increasing shortness of breath with activities she once found trivial, such as walking to the local market or tending to her garden. This has progressed to the point of needing to sleep on multiple pillows to breathe comfortably. These symptoms, coupled with noticeable ankle swelling and profound fatigue, prompted her to seek medical attention beyond her routine check-ups.

Her clinical presentation is classic for heart failure. The workup, including an ECG and a pivotal echocardiogram, revealed an old, 'silent' heart attack that has led to a condition known as ischemic cardiomyopathy. Her heart's main pumping chamber is now severely weakened, functioning at an ejection fraction of only 32%. This diagnosis not only explains her debilitating symptoms but also places her at high risk for sudden cardiac death. Despite the gravity of her condition, Ms. McGonagall has approached her diagnosis with the same pragmatism and resolve that defined her career. She understands the rationale for aggressive medical management and the recommendation for an implantable cardioverter-defibrillator (ICD) as a necessary step to protect her against life-threatening arrhythmias.

III. CLINICAL REPORTS & IMAGING

■ *CARDIOLOGY CONSULT NOTE*

Report Text:
'''

HOSPITAL CONSULTATION REPORT

PATIENT: Minerva McGonagall
MRN: MRN-215
DATE OF CONSULT: 2024-11-20
REFERRING PHYSICIAN: Dr. Pomona Sprout, MD
CONSULTING PHYSICIAN: Dr. Alastor Moody, MD, FACC

REASON FOR CONSULTATION: Evaluation of progressive dyspnea and suspected heart failure.

HISTORY OF PRESENT ILLNESS:
Ms. McGonagall is a 79-year-old widowed female, a retired university professor, referred by her primary care physician, Dr. Sprout, for evaluation of worsening shortness of breath. The patient reports a 6-month history of progressive exertional dyspnea. Initially, she would only notice it after climbing two flights of stairs, but it has now progressed to where she feels breathless after walking half a block on level ground. Over the past month, she has developed a need to sleep propped up on three pillows (orthopnea) and has been waking up suddenly at night feeling like she can't catch her breath (paroxysmal nocturnal dyspnea). She also notes swelling in her ankles and feet, which is worse at the end of the day and improves overnight. She denies any chest pain, pressure, or palpitations. She reports significant fatigue, which is impacting her ability to perform daily activities.

She has a long-standing history of hypertension, for which she takes lisinopril. Her PCP, Dr. Sprout, recently noted elevated blood pressure and peripheral edema during a routine visit, prompting this referral. The patient has no history of known coronary artery disease, myocardial infarction, or valvular heart disease.

PAST MEDICAL HISTORY:
1. Essential Hypertension (diagnosed ~15 years ago)
2. Hyperlipidemia
3. Osteoarthritis

PAST SURGICAL HISTORY:
1. Cholecystectomy (1998)
2. Right total knee arthroplasty (2010)

MEDICATIONS:
1. Lisinopril 10 mg daily
2. Atorvastatin 20 mg daily
3. Aspirin 81 mg daily

ALLERGIES: No Known Drug Allergies.

SOCIAL HISTORY:
Ms. McGonagall is a widow ...

■ *ECG REPORT*

Report Text:
'''

12-LEAD ELECTROCARDIOGRAM REPORT

PATIENT: Minerva McGonagall
MRN: MRN-215
DATE OF STUDY: 2024-12-20
REFERRING PHYSICIAN: Dr. Alastor Moody, MD

TECHNICAL DETAILS:
A standard 12-lead ECG was performed at a speed of 25 mm/s and an amplitude of 10 mm/mV.

INTERPRETATION:
- **Rhythm:** Normal Sinus Rhythm
- **Heart Rate:** 88 bpm
- **Axis:** Normal axis (+45 degrees)
- **Intervals:**
- PR Interval: 180 ms
- QRS Duration: 110 ms (borderline prolonged)
- QTc (Bazett): 450 ms

FINDINGS:
- **Q waves:** Pathological Q waves are present in leads V1-V4.
- **ST Segment:** No acute ST-segment elevation or depression is noted.
- **T waves:** T-wave inversions are noted in leads V1-V4 and in lead aVL.
- **Progression:** Poor R wave progression across the precordial leads.

IMPRESSION:
1. Normal sinus rhythm.
2. ECG findings (pathological Q waves in V1-V4, poor R wave progression) are consistent with an **old anterior wall myocardial infarction** of indeterminate age.
3. Borderline intraventricular conduction delay.
4. No evidence of acute ischemia.

CLINICAL CORRELATION:
These findings suggest an underlying ischemic cardiomyopathy, which is a likely contributor to the patient's presenting symptoms of heart failure. Further evaluation with echocardiography is strongly recommended to assess the structural and functional consequences, specifically the left ventricular ejection fraction.

_
Dr. Alastor Moody, MD, FACC
Interpreting Physician
Hogwarts Medical Center Cardiology
'''

■ *ECHOCARDIOGRAM REPORT*

Report Text:
'''

TRANSTHORACIC ECHOCARDIOGRAM REPORT

PATIENT: Minerva McGonagall
MRN: MRN-215
DATE OF STUDY: 2025-01-10
REFERRING PHYSICIAN: Dr. Alastor Moody, MD

INDICATION: New onset heart failure. Assess left ventricular size and systolic function.

TECHNIQUE:
2D and M-mode echocardiography, as well as pulsed, continuous-wave, and color-flow Doppler interrogation, were performed from parasternal, apical, and subcostal windows. The study was of good technical quality.

FINDINGS:

1. LEFT VENTRICLE:
- **Size:** The left ventricle is severely dilated. LV end-diastolic diameter (LVEDD) is 6.2 cm (Normal < 5.3 cm). LV end-systolic diameter (LVESD) is 5.1 cm.
- **Wall Thickness:** Normal wall thickness.
- **Systolic Function:** There is severely reduced global left ventricular systolic function. The estimated **ejection fraction (EF) is 32%** by Simpson's biplane method.
- **Wall Motion:** Akinesis of the anterior wall and apex. Hypokinesis of the anteroseptum.

2. RIGHT VENTRICLE:
- **Size:** Mildly dilated.
- **Systolic Function:** Mildly reduced right ventricular systolic function. Tricuspid Annular Plane Systolic Excursion (TAPSE) is 1.5 cm.

3. ATRIA:
- **Left Atrium:** Severely dilated. Volume index is 48 mL/m2.
- **Right Atrium:** Moderately dilated.

4. VALVES:
- **Mitral Valve:** Structurally normal leaflets. Moderate (2+) functional mitral regurgitation is present, secondary to annular dilation.
- **Aortic Valve:** Mildly sclerotic leaflets without significant stenosis. Peak gradient is 12 mmHg.
- **Tricuspid Valve:** Structurally normal. Mild (1+) tricuspid regurgitation is present. The RV-RA gradient allows for estimation of pulmonary artery pressure.
- **Pulmonic Valve:** Structurally normal.

5. HEMODYNAMICS (DOPPLER):
- **Diastolic Function:** Grade III (restrictive) diastolic dysfunction is present, evidence...

■ *CARDIOLOGY FOLLOWUP NOTE*

Report Text:
'''
CARDIOLOGY FOLLOW-UP NOTE

PATIENT: Minerva McGonagall
MRN: MRN-215
DATE OF VISIT: 2025-01-12

SUBJECTIVE:
Ms. McGonagall returns to the clinic today to discuss the results of her recent cardiac testing. She reports some improvement in her breathing and a 5-pound weight loss since starting Furosemide. She still has significant exertional limitations and notes some persistent ankle swelling. She is tolerating the new medications (Carvedilol, Spironolactone) without dizziness or other side effects.

OBJECTIVE:
VITAL SIGNS: BP 128/78 mmHg, HR 75 bpm, RR 16, SpO2 96% on room air.
WEIGHT: 140 lbs (down from 145 lbs).
HEART: RRR, S1/S2, S3 gallop is no longer audible.
LUNGS: Clear to auscultation bilaterally.
EXTREMITIES: Trace pitting edema at the ankles.

REVIEW OF RECENT RESULTS:
- **ECG (2024-12-20):** Showed evidence of an old anterior MI.
- **Echocardiogram (2025-01-10):** This was the most critical test. It confirmed the diagnosis of an ischemic cardiomyopathy with **severely reduced left ventricular ejection fraction of 32%**. It also showed severe LV dilation and Grade III diastolic dysfunction.
- **Labs (2024-11-16):** Initial labs showed elevated BNP (850 pg/mL) and mild renal insufficiency (Creatinine 1.3). Repeat labs today show Creatinine is stable at 1.4 and Potassium is 4.0 mEq/L.

ASSESSMENT:
1. **Ischemic Cardiomyopathy with Heart Failure with Reduced Ejection Fraction (HFrEF)**: Patient has responded well to initiation of GDMT with diuresis and neurohormonal blockade. We have achieved a euvolemic state.

PLAN:
1. **Medical Therapy:** Continue current regimen: Lisinopril 10mg, Carvedilol 12.5mg BID, Spironolactone 25mg, Furosemide 40mg, Aspirin 81mg, Atorvastatin 20mg. The goal is to continue uptitrating beta-blocker as tolerated.

2. **Primary Prevention of Sudden Cardiac Death (SCD):**
* I have had a long discussion with Ms. McGonagall regarding her d...

■ *METABOLIC PANEL LAB REPORT*

Report Text:
'''
COMPREHENSIVE METABOLIC PANEL REPORT

PATIENT: Minerva McGonagall
MRN: MRN-215
COLLECTION DATE: 2024-11-15 10:20
REPORT DATE: 2024-11-16 08:00
ACCESSION: LAB-2024-98342

TEST NAME	RESULT	FLAG	REFERENCE RANGE	UNITS
SODIUM	138		136 - 145	mmol/L
POTASSIUM	3.8		3.5 - 5.1	mmol/L
CHLORIDE	102		98 - 107	mmol/L
CARBON DIOXIDE (CO2)	24		22 - 29	mmol/L
UREA NITROGEN (BUN)	25	H	6 - 20	mg/dL
CREATININE	1.3	H	0.59 - 1.04	mg/dL
eGFR	42	L	>60	mL/min/1.73m²
GLUCOSE	105		70 - 99	mg/dL
CALCIUM	9.4		8.6 - 10.3	mg/dL
PROTEIN, TOTAL	7.1		6.4 - 8.3	g/dL
ALBUMIN	4.0		3.5 - 5.2	g/dL
BILIRUBIN, TOTAL	0.8		0.1 - 1.2	mg/dL
ALKALINE PHOSPHATASE	98		39 - 117	U/L
AST (SGOT)	25		0 - 32	U/L
ALT (SGPT)	22		0 - 33	U/L

LABORATORY COMMENTS:
- eGFR calculated using the CKD-EPI 2021 equation.
- Elevated BUN and Creatinine with reduced eGFR indicate moderate renal insufficiency, which may be related to cardiorenal syndrome. This requires careful monitoring during diuresis and with the use of ACE inhibitors.

PERFORMING LAB:
Hogwarts Diagnostics Laboratory
12 Grimmauld Place, Boston, MA 0...
