

Patient Name

Sol Lopez

Key Highlights for Medical Decision-Making (MDM) Improvement

- Confirm Atrial Fibrillation diagnosis with a 12-lead EKG.
- Calculate and document CHA2DS2-VASc score to stratify stroke risk and HAS-BLED score to assess bleeding risk before initiating anticoagulation.
- Document the rationale for choosing a rate control strategy (preferred initially given asymptomatic status and age) versus rhythm control.
- Order baseline laboratory tests including CBC, CMP (to assess renal and liver function for medication dosing), TSH (to rule out hyperthyroidism as a cause of AFib), and a lipid panel.
- Order an echocardiogram to assess for structural heart disease, left atrial size, and left ventricular function, which impacts AFib management and prognosis.
- Address Stage 2 Hypertension (BP 146/82 mmHg) concurrently with AFib management, including setting a BP target (<130/80 mmHg) and initiating lifestyle counseling and appropriate medication (e.g., leveraging beta-blocker used for rate control).
- Perform thorough medication reconciliation, specifically addressing the patient's use of naproxen (an NSAID). Counsel discontinuation due to increased bleeding risk with anticoagulation and potential adverse effects on blood pressure and renal function. Recommend safer alternatives like acetaminophen for headaches.
- Systematically review and address age-appropriate preventative health maintenance based on USPSTF guidelines for a 71-year-old female who has not had recent medical care.
- Establish a clear follow-up plan to monitor response to therapy (heart rate, blood pressure), medication tolerance/side effects, review lab/imaging results, and reinforce patient education.

Chief Concern

Recently diagnosed with atrial fibrillation via Apple Watch notification and wants to know about medication options.

Assessment

Ms. Lopez is a 71-year-old female presenting for evaluation of newly detected atrial fibrillation, identified by her Apple Watch two weeks prior. She is asymptomatic. History is significant for untreated hypertension but no prior cardiovascular events, HF, DM, or significant comorbidities. She denies alcohol, tobacco, or illicit drug use and takes only occasional naproxen. Objective findings include elevated blood pressure (146/82 mmHg) and an irregularly irregular heart rhythm at 88 bpm, consistent with atrial fibrillation. Physical exam is otherwise unremarkable. Based on her age, hypertension, and female sex, her CHA2DS2-VASc score is 3, indicating a high risk for stroke and a clear indication for anticoagulation. Her HAS-BLED score is likely 1-2 (HTN=1, potentially Age=1 depending on threshold used), suggesting a moderate bleeding risk that needs consideration but

does not preclude anticoagulation. Primary problems are newly diagnosed Atrial Fibrillation and uncontrolled Stage 2 Hypertension. Differential diagnosis for palpitations/arrhythmia includes frequent PACs or other SVTs, but the irregularly irregular rhythm strongly suggests AFib. Headaches require evaluation for safer analgesic options.

Plan

Atrial Fibrillation (New Diagnosis)

Status	New diagnosis, currently asymptomatic.
Decision Making and Diagnositic Plan	The primary goal is stroke prevention and symptom control (though currently asymptomatic). Given the CHA2DS2-VASc score of 3 (Age $\geq 65 = 1$, HTN = 1, Female = 1), oral anticoagulation is strongly recommended to reduce stroke risk. A rate control strategy is appropriate initially given her asymptomatic status. Diagnostic plan includes: 1) Obtain 12-lead EKG today to confirm AFib rhythm. 2) Order baseline labs: CBC (check for anemia/thrombocytopenia), CMP (assess renal function for DOAC dosing, check electrolytes, liver function), TSH (rule out thyroid dysfunction). 3) Order Transthoracic Echocardiogram (TTE) to evaluate left atrial size, LV function, and rule out valvular or structural heart disease. 4) Calculate and document CHA2DS2-VASc and HAS-BLED scores.
Treatment/Medication Plan	Initiate anticoagulation: Apixaban (Eliquis) 5mg PO BID recommended (adjust dose based on age >80 , weight $<60\text{kg}$, Cr >1.5 from CMP results). Alternatives include Rivaroxaban, Edoxaban, Dabigatran, or Warfarin (less preferred due to monitoring needs). Discuss risks (bleeding) and benefits (stroke reduction) with patient. Initiate rate control: Metoprolol Succinate (Toprol XL) 25mg PO daily (beta-blocker, also treats HTN). Target resting heart rate <110 bpm (lenient control initially). Alternative: Diltiazem ER if beta-blocker contraindicated or not tolerated. Medication Reconciliation: Discontinue Naproxen. Add Apixaban 5mg PO BID and Metoprolol Succinate 25mg PO daily.
Contingency Planning	If EKG shows sinus rhythm, consider outpatient cardiac monitoring (e.g., Holter or event monitor) to assess AFib burden. If resting HR remains >110 bpm despite initial Metoprolol dose, titrate dose upwards (e.g., to 50mg daily) as tolerated, monitoring BP and HR. If patient develops AFib symptoms (palpitations, dyspnea, fatigue), reassess rate control adequacy or consider cardiology consultation for rhythm control strategy. If significant bleeding occurs on anticoagulation, instruct patient to hold medication and seek immediate medical evaluation.

Considerations for Documentation Improvement

Document EKG findings confirming AFib. Clearly state the calculated CHA2DS2-VASc and HAS-BLED scores. Detail the risk/benefit discussion regarding anticoagulation with the patient. Specify the target heart rate goal for rate control therapy. Document rationale for choosing specific anticoagulant and rate control agent.

Considerations for Cost Effective Care Improvement

Prescribe generic Metoprolol Succinate. Discuss costs of DOACs; explore patient assistance programs or preferred formulary options if cost is a barrier. Warfarin is a lower-cost alternative but requires regular INR monitoring and dietary considerations.

Hypertension, Stage 2

Status

Uncontrolled, untreated.

Decision Making and Diagnositic Plan

BP reading of 146/82 mmHg confirms Stage 2 HTN. Treatment is indicated to reduce cardiovascular risk, especially important given concurrent AFib. Goal BP is <130/80 mmHg per current guidelines. Labs ordered for AFib (CMP for renal function/electrolytes, Lipids) and EKG (assess for LVH) will also inform HTN management. Encourage lifestyle modifications.

Treatment/Medication Plan

Lifestyle Counseling: Advise DASH diet, sodium restriction (<1500 mg/day), regular moderate-intensity aerobic exercise (e.g., brisk walking 30 minutes, 5 days/week), maintain healthy weight. Medication: Metoprolol Succinate 25mg PO daily initiated for AFib rate control will also treat HTN. Assess BP response at follow-up.

Contingency Planning

If BP remains >130/80 mmHg at follow-up despite Metoprolol and lifestyle efforts, consider adding a second agent such as Amlodipine 5mg PO daily or Lisinopril 10mg PO daily (monitor renal function and potassium if starting ACEi/ARB). Encourage home blood pressure monitoring for better assessment and titration.

Considerations for Documentation Improvement

Document the target BP goal (<130/80 mmHg). Record specific lifestyle modification counseling provided. Track BP readings over time. Document rationale for medication choice and any subsequent adjustments.

Considerations for Cost Effective Care Improvement

Prescribe generic Metoprolol Succinate. If additional agents are needed, generic options like Amlodipine or Lisinopril are cost-effective. Encourage use of an affordable, validated home BP monitor.

Headaches

Status

Occasional, currently self-managed with Naproxen.

**Decision Making and
Diagnostic Plan**

Need to advise against Naproxen (NSAID) use due to significantly increased bleeding risk with anticoagulation, potential to worsen HTN, and risk of renal injury. Obtain more detail on headache characteristics (frequency, quality, triggers) if they persist or worsen. No further diagnostic workup indicated at this time unless red flags develop.

**Treatment/Medication
Plan**

Medication Reconciliation: Counsel patient to discontinue Naproxen immediately. Recommend Acetaminophen (Tylenol) 650-1000mg PO Q6H PRN (max 3-4g/day) as a safer alternative for occasional headaches. Discuss non-pharmacologic measures: hydration, stress management, adequate sleep.

Contingency Planning

If headaches become more frequent, severe, or change in character, reassess diagnosis. Consider neuroimaging if neurological red flags emerge. If Acetaminophen is ineffective, explore other non-NSAID options or re-evaluate headache type.

**Considerations for
Documentation
Improvement**

Document counseling provided regarding NSAID avoidance and the rationale (bleeding risk, HTN). Record recommendation for Acetaminophen. Document basic headache characteristics if obtained.

**Considerations for Cost
Effective Care
Improvement**

Recommend generic Acetaminophen. Non-pharmacologic strategies are inherently cost-effective.

Preventative Care Needs

Status

Overdue; patient has not seen a physician in years.

**Decision Making and
Diagnostic Plan**

Systematically address age and sex-appropriate preventative screenings and vaccinations based on USPSTF and ACIP guidelines for a 71-year-old female.

**Treatment/Medication
Plan**

Order/Recommend:

- Colon Cancer Screening: Discuss options (Colonoscopy preferred; alternatives FIT, Cologuard).
- Breast Cancer Screening: Order screening mammogram.
- Osteoporosis Screening: Order DEXA scan.
- Vaccinations: Assess status and administer/prescribe as needed: Influenza (annually), Pneumococcal (PCV20 or PCV15 followed by PPSV23), Tdap/Td booster (if due), Shingrix (2-dose series). COVID-19 vaccine/booster.
- Labs: Lipid panel, CMP (includes glucose), CBC, TSH (already ordered for AFib workup cover some screening aspects). Consider HbA1c for diabetes screening.
- Other: Assess fall risk, vision, and hearing.

Contingency Planning

Schedule ordered tests and vaccinations. Follow up on results and address any abnormal findings appropriately. If patient declines certain screenings, document discussion and rationale.

Considerations for Documentation Improvement

Use a flowsheet or dedicated section to track health maintenance status. Document which screenings/vaccines were discussed, offered, ordered, or declined. Record dates of completion.

Considerations for Cost Effective Care Improvement

Utilize insurance coverage for preventative services (often fully covered). Offer options like FIT testing for colon cancer screening if patient prefers a less invasive/costly initial step (though colonoscopy is diagnostic and therapeutic).

Item 1

Colon Cancer Screening: Recommend screening for colorectal cancer. Options include colonoscopy (preferred, every 10 years if normal), annual Fecal Immunochemical Test (FIT), or stool DNA test (Cologuard, every 3 years). Discuss risks/benefits of each. USPSTF recommends screening for adults aged 45 to 75 years.

Item 2

Breast Cancer Screening: Recommend biennial screening mammography. USPSTF recommends screening for women aged 50 to 74 years.

Item 3

Osteoporosis Screening: Recommend bone density measurement (DEXA scan) to screen for osteoporosis. USPSTF recommends screening for women aged 65 years and older.

Item 4

Vaccinations: Assess and update immunizations including Influenza (annual), Pneumococcal (PCV20 or PCV15+PPSV23 series recommended for adults ≥ 65), Tetanus/Diphtheria/Pertussis (Tdap once if never received, then Td booster every 10 years), Herpes Zoster (Shingrix 2-dose series recommended for adults ≥ 50), and COVID-19 vaccine/boosters per current CDC guidance.

Item 5

Lipid Screening: Assess cardiovascular risk and screen for dyslipidemia with a fasting lipid panel (already included in initial lab orders). Frequency depends on baseline levels and overall CV risk.

Item 6

Diabetes Screening: Screen for diabetes with fasting plasma glucose (part of CMP) or HbA1c (consider ordering). Screening recommended every 3 years for adults without risk factors, more often if overweight/obese or other risks.

Considerations for Documentation Improvement

Maintain an up-to-date health maintenance flowsheet within the EMR. Document discussions about each screening/vaccine, patient preferences/decisions (accepted, declined, deferred), dates offered, dates completed, and results. Set automated reminders for when future screenings/vaccinations are due.

Item 1

Schedule return visit in 2-4 weeks.

Item 2	Review results of EKG, Echocardiogram, and baseline labs (CBC, CMP, TSH, Lipids) at next visit.
Item 3	Assess clinical response: Evaluate heart rate and blood pressure control on Metoprolol. Assess for any AFib symptoms.
Item 4	Assess medication tolerance: Specifically inquire about any signs of bleeding (bruising, blood in stool/urine) on Apixaban and any side effects from Metoprolol (fatigue, dizziness, bradycardia).
Item 5	Review lifestyle modifications (diet, exercise) and address any barriers.
Item 6	Confirm status of initiated preventative care screenings (e.g., mammogram scheduled, DEXA ordered). Reinforce importance of completion.
Considerations for Documentation Improvement	Clearly state the specific parameters to be assessed at the next visit (e.g., 'Recheck BP and HR', 'Review TSH result', 'Assess for bleeding symptoms'). Document patient understanding of the follow-up plan and when/how to seek care for urgent issues (e.g., signs of stroke, significant bleeding).