



The Patient Write Up: The Assessment and Plan

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The Patient Write Up

- ▶ History
- ▶ Physical Exam
- ▶ Diagnostics
- ▶ Assessment
- ▶ Plan

History

- ▶ Chief Complaint
- ▶ History of Present Illness
- ▶ Past Medical History
- ▶ Past Surgical History
- ▶ Medications
- ▶ Allergies
- ▶ Social History
- ▶ Family History
- ▶ Review of Systems

Physical Exam

- ▶ Vital signs
- ▶ General appearance
- ▶ HEENT
- ▶ Neck
- ▶ Heart
- ▶ Lungs
- ▶ Abdomen
- ▶ Genital/urinary
- ▶ Extremities
- ▶ Neurological
- ▶ Psychiatric

Diagnostics

- ▶ Laboratory Data
- ▶ Imaging
- ▶ EKG

Assessment and Plan

- ▶ Summary statement
- ▶ Diagnoses
- ▶ Discussion
- ▶ Diagnostic plan
- ▶ Treatment plan

Summary Statement

- ▶ One sentence that summarizes the case.
 - ▶ This is a **63 y.o. man with history of COPD, CHF, who presents with** abdominal pain and is **found to have** appendicitis.
 - ▶ This is a 55 y.o. woman with history of HTN, Type 2 DM, who presents chest pain and is found to have an NSTEMI.
 - ▶ This is a 70 y.o. man with history of ESRD on HD, dementia, CVA, who presents with SOB and is found to have a CHF exacerbation.

Summary Statement



- ▶ This is an **82 y.o. woman with** (pertinent) **history of** CKD and breast cancer on chemotherapy, **who presents with** AMS and **is found to have** septic shock, pneumonia and acute kidney injury.
- ▶ This is a 68 y.o. man with history of HTN and hyperlipidemia who presents with CAD and is being admitted by CTS for a CABG.
- ▶ This is a 75 y.o. woman with history of cirrhosis who presents with ascites and was transferred from Hunt Regional Medical Center to be evaluated by IR for a TIPS.

Assessment and Plan

- ▶ Summary statement
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- ▶ Treatment plan

Diagnoses

- ▶ 2 Formats:
 1. Separated Diagnoses and Plans
 2. Combined Diagnoses and Plans
- ▶ Organization
 - ▶ Acuity
 - ▶ Organ system

Diagnoses (Problem list)

- ▶ Separated Diagnoses and Plans
 - ▶ 1. **Diagnosis**
 - ▶ 2. **Diagnosis**
 - ▶ 3. **Diagnosis**
 - ▶ Plan
 - ▶ 1. Discussion, Diagnostic plan, Treatment Plan
 - ▶ 2. Discussion, Diagnostic plan, Treatment Plan
 - ▶ 3. Discussion, Diagnostic plan, Treatment Plan
- ▶ Combined Diagnoses and Plans
 - ▶ 1. **Diagnosis** – Discussion, Diagnostic Plan, Treatment Plan
 - ▶ 2. **Diagnosis** – Discussion, Diagnostic Plan, Treatment Plan
 - ▶ 3. **Diagnosis** – Discussion, Diagnostic Plan Treatment Plan

Diagnoses

- ▶ Active (acute) diagnoses or symptoms
 - ▶ Being addressed this admission, organized by acuity
 - ▶ Abdominal pain
 - ▶ Acute kidney injury
- ▶ Chronic diagnoses or medical conditions
 - ▶ Being addressed this admission
 - ▶ Type 2 DM
 - ▶ HTN
 - ▶ Anemia
- ▶ Chronic diagnoses or medical conditions that are pertinent to the case
 - ▶ May not be addressed this admission
 - ▶ Chronic pain
 - ▶ Dementia

Assessment and Plan

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- ▶ Treatment plan

Discussion

- ▶ **Most important part of the Assessment and Plan**
- ▶ Associated with each diagnosis or problem on Assessment
- ▶ Components
 - ▶ Analysis and interpretation of H&P and clinical data
 - ▶ Differential diagnosis - ranked in order of likelihood, mostly likely diagnosis first
 - ▶ Evidence for and against each differential diagnosis
 - ▶ Input from consultants
 - ▶ Reasoning used to formulate a management plan

Assessment and Plan

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Diagnostic plan

- ▶ Diagnostic work up of clinical condition
 - ▶ Labs
 - ▶ Imaging
 - ▶ Procedures – Thoracentesis, Biopsy
 - ▶ Studies - Echocardiogram
 - ▶ Consultations

Assessment and Plan

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Treatment Plan

- ▶ Medications
- ▶ IVF
- ▶ Nutrition
- ▶ Procedures – thoracentesis, chest tube
- ▶ Radiation
- ▶ Surgery

Assessment and Plan

- ▶ Summary statement
- ▶ Diagnoses
- ▶ Discussion
- ▶ Diagnostic plan
- ▶ Treatment plan

Separated Assessment and Plan

- ▶ Assessment: (**Summary statement**) This is a 45 y.o. man with history of Type 2 DM, HTN, who presents with chest pain. (**Diagnoses** - Organized by acuity)
 - ▶ Chest pain
 - ▶ Acute kidney injury
 - ▶ Anemia
 - ▶ DM 2
 - ▶ HTN

Separated Assessment and Plan

- ▶ Plan – Diagnosis, discussion, diagnostic plan, treatment plan
 - ▶ Chest pain - Acute, atypical for angina with multiple cardiac risk factors – DM, HTN. Differential diagnosis includes GERD, MSK pain, ACS. A GI cause of chest pain is most likely since the pain is worse with laying supine, is associated with dyspepsia and the patient uses NSAIDS. MSK pain is less likely since there is no history of trauma, the pain is not worse with movement and there is no tenderness on exam. ACS is possible however pain is not exertional and not relieved with nitrates and EKG shows no ischemic changes.
 - ▶ Check serial troponin I to rule out AMI and d-dimer
 - ▶ Check echocardiogram to assess heart structure and EF.
 - ▶ Consult cardiology
 - ▶ Admit to telemetry to monitor for arrhythmias.
 - ▶ Start a trial of PPI for possible GERD.

Separated Assessment and Plan

- ▶ Plan - Diagnosis, discussion, diagnostic plan, treatment plan
 - ▶ Acute kidney injury – likely due to dehydration and poor po intake. NSAID use could also be a contributing factor.
 - ▶ Check renal US, urine Na and urine Cr
 - ▶ Monitor I/Os, especially UOP
 - ▶ Check daily BMP
 - ▶ Treat with IVF
 - ▶ Hold ace inhibitor
 - ▶ Anemia – acute, microcytic, which could be caused by iron deficiency.
 - ▶ Check iron studies, FOBT
 - ▶ Check daily CBC
 - ▶ Transfuse to keep hgb > 7.0

Separated Assessment and Plan

- ▶ Plan - Diagnosis, discussion, diagnostic plan, treatment plan
 - ▶ Type 2 DM – poorly controlled due to noncompliance with insulin.
 - ▶ Place on basal and bolus insulin.
 - ▶ Monitor glucose AC and HS.
 - ▶ Check Hgb A1C
 - ▶ HTN – controlled.
 - ▶ Hold ace inhibitor due to AKI. Cont BB.

Combined Assessment and Plan

- ▶ Assessment/Plan: (**Summary statement**) This is a 45 y.o. man with history of Type 2 DM, HTN, who presents with chest pain. (**Diagnoses** - Organized by acuity)
 - ▶ Chest pain – (**Discussion**). Acute, atypical for angina with multiple cardiac risk factors. (**Diagnostic plan**) Check serial troponin I, d-dimer, echocardiogram. (**Treatment plan**) Admit to telemetry. Start PPI.
 - ▶ Acute kidney injury – Likely prerenal. Check urine sodium and creatinine, renal US. Monitor UOP. Treat with IVF.
 - ▶ Anemia – DDx includes iron deficiency and AOCD. Microcytic anemia makes iron deficiency more likely. Check iron studies. Transfuse to keep hgb >7
 - ▶ DM 2 – (**Discussion**) uncontrolled, likely due to noncompliance with insulin therapy. Check Hgb A1c. Place on basal and bolus insulin.
 - ▶ HTN – controlled. Hold ace inhibitor and continue metoprolol

Assessment/Plan – by Organ System

- ▶ Useful for complicated patients with numerous diagnoses (ICU patients)
- ▶ This is a 69 year-old man with history of DM Type 2, COPD, CKD 3, HTN, and dementia, who presents from his nursing home with AMS. This was noticed today by the nursing home staff and associated with cough, SOB, fever to 101 and vomiting. In the ED, he was hypotensive, given IVF boluses and started on a levophed drip. He was hypoxic so was placed on a NRB.

Assessment/Plan – by Organ System

- ▶ PMH: DM type 2, COPD,CKD 3, HTN, HLD, dementia
- ▶ PSH: appendectomy
- ▶ Medications: metformin, glipizide, Symbicort, albuterol prn, lisinopril, HCTZ, atorvastatin, Aricept
- ▶ Allergies: NKDA
- ▶ SH: has lived at her NH for 10 yrs, quit smoking 15 yrs ago, does not drink alcohol
- ▶ FH: his mother had dementia

Assessment/Plan – by Organ System

- ▶ Physical exam
 - ▶ Vital signs: BP 100/54, HR 119, RR 30, Temp 102, o2 sats 90% on NRB
 - ▶ General – lethargic, underweight, using accessory muscles, mumbling
 - ▶ HEENT – PERRL, does not cooperate with EOMI, O/P clear with dry MM
 - ▶ Neck – no cervical LAD, supple.
 - ▶ Heart – tachycardic, regular, 2/6 murmur at RUSB
 - ▶ Lungs – rt basilar rales, bilateral wheezing
 - ▶ Abd – soft, NT, ND
 - ▶ Extremities – venous stasis

Assessment/Plan – by Organ System

- ▶ Labs
 - ▶ WBC 22, HGB 8, Plt 87,
 - ▶ Na 128, Cr 3.2 (baseline 1.5), lactic acid 3.5, Alk phos 121, AST 255, ALT 361, Tbili 0.9,
 - ▶ UA - +LE, wbc 53
- ▶ Imaging
 - ▶ CT head – no acute disease
 - ▶ CXR – RLL infiltrate
- ▶ EKG – sinus tachycardia

Assessment/Plan – Separated by Organ System

- ▶ (Summary statement) This is a 69 year-old man with history of DM Type 2, COPD, CKD 3, dementia, who presents from his nursing home with AMS.
 - ▶ Assessment –Diagnoses (Problem list)
 - ▶ Acute hypoxic respiratory failure
 - ▶ Shock
 - ▶ Acute on chronic renal failure
 - ▶ Acute encephalopathy
 - ▶ Elevated LFTs
 - ▶ Anemia
 - ▶ Thrombocytopenia
 - ▶ Hyponatremia

Assessment/Plan - by Organ System

- ▶ Plan – Discussion, Diagnostic plan and Treatment plan
 - ▶ Pulmonary – Respiratory failure likely due to pneumonia, possibly from aspiration, given RLL infiltrate on CXR and recent vomiting. Other DDX includes PE, COPD exacerbation. Less likely CHF as patient appears volume depleted. Check ABG. Cannot get CTA due to AKI. Check LE venous dopplers. Place on BIPAP and o2 to maintain sats >90%.
 - ▶ CV – Shock, likely due to sepsis and possibly hypovolemia. Place on IVF, cont levophed drip to maintain MAP >65, and treat with broad spectrum antibiotics.
 - ▶ ID – Pneumonia, suspect CAP vs aspiration pneumonia. Pt resides in a long term care facility and has had recent antibiotic use, putting him at higher risk of MDRO. Check blood cultures, sputum cultures, urine legionella and pneumococcal antigens. Check for Covid 19 and influenza. Treat with vancomycin and meropenem.

Assessment/Plan - by Organ System

- ▶ Renal
 - ▶ AKI on CKD - likely due to ATN from septic shock and prerenal cause from GI losses. Check urine sodium and creatinine, and renal US. Monitor UOP. Hold ace inhibitor and diuretic. Cont IVF.
 - ▶ Hyponatremia – hypovolemic, likely due to poor po intake and vomiting. Treat with NS IVF. Monitor BMP every 8 hours.
- ▶ GI – Elev LFTs – likely due to shock liver. Check acetaminophen and alcohol levels. Treat with supportive care and monitor serial LFTs. Minimize acetaminophen use.

Assessment/Plan - by Organ System

▶ Heme

- ▶ Anemia – Ddx includes anemia of chronic kidney disease. There is no evidence of bleeding. Transfuse to keep hgb >7.
- ▶ Thrombocytopenia – in the setting of sepsis would need to consider DIC. TTP is also on the differential given AKI and AMS. TTP is less likely given no evidence of hemolysis with normal Tbili. Check d-dimer, fibrinogen, haptoglobin, LDH. Transfuse if plt < 10 k or if there is bleeding.
- ▶ Neuro – AMS/acute encephalopathy – suspect metabolic and infectious due to hyponatremia, AKI, and sepsis. Keep NPO. Will need BSE prior to po intake. Monitor neuro checks Q 4 hrs. CT head showed no acute disease.
- ▶ FEN – keep NPO for now, cont IVF.

Progress notes

- ▶ S - Subjective
- ▶ O - Objective
- ▶ A - Assessment
- ▶ P - Plan

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SOAP: Separated Assessment and Plan

- ▶ Assessment: This is a 45 y.o. man with history of Type 2 DM, HTN, who presents with chest pain. (Organized by acuity)
 - ▶ Chest pain
 - ▶ Acute kidney injury
 - ▶ Anemia
 - ▶ DM 2
 - ▶ HTN

Combined Assessment and Plan

- ▶ Assessment/Plan: This is a 45 y.o. man with history of Type 2 DM, HTN, who presents with chest pain.
 - ▶ NSTEMI – Chest pain has resolved and pt is HDS. Echo showed normal EF with no arrhythmia on tele. Continue ASA, therapeutic lovenox, statin and BB. Check FLP. Cardiology plans LHC in am.
 - ▶ Acute kidney injury – prerenal. Renal function has improved with IVF. Baseline is unknown. US showed no obstruction. Cont IVF, Monitor BMP daily, renally dose medications.
 - ▶ Anemia – due to iron deficiency. Hgb has remained stable with no evidence of active bleeding. Monitor H/H.
 - ▶ DM 2 – uncontrolled, increase lispro insulin AC. A1C is 9.4.
 - ▶ HTN – controlled. Cont BB.

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Progress Note - Discussion

- ▶ **Most important part of the Assessment and Plan**
- ▶ Associated with each diagnosis or problem on Assessment
- ▶ Components
 - ▶ Analysis and interpretation of **new symptoms, signs, clinical data**
 - ▶ **Updated differential diagnosis** – ranked in order of likelihood, mostly likely diagnosis first
 - ▶ Evidence for and against each differential diagnosis
 - ▶ Input from consultants
 - ▶ **Progress** – improvement, worsening
 - ▶ **Updates to management** – additional work up, changes to treatment

Assessment and Plan: Ending

- ▶ GI prophylaxis
- ▶ VTE prophylaxis
- ▶ Code status
- ▶ MPOA or emergency contact
- ▶ Estimated discharge date
- ▶ Dispo
- ▶ Barriers to discharge
- ▶ Discussions with patient, family

Patient Write Ups - Tips

- ▶ Accurate physical exam
- ▶ Change the assessment and plan daily
- ▶ Minimize copy and paste