S.O.A.P ANNOTATION GUIDELINES

This document consists of instructions for annotating sentences from Emergency Department reports according to the S.O.A.P documentation format.
Table of Contents

Overview ............................................................................................................................................. 3

S.O.A.P ................................................................................................................................................ 4
  Subjective .......................................................................................................................................... 4
  Objective ......................................................................................................................................... 6
  Assessment ..................................................................................................................................... 7
  Plan .................................................................................................................................................. 8
  Not Applicable .............................................................................................................................. 9
  Difficult Cases and Helpful Hints ................................................................................................. 10
Overview

The objective of this task is given a sentence from an Emergency Department report, classify the sentence the with the corresponding S.O.A.P class(es) or as Not applicable. S.O.A.P is a standard way physicians divide their notes. It is used in a variety of medical application areas including: psychiatry, physical therapy, emergency medicine etc. The four classes of S.O.A.P include: Subjective, Objective, Assessment and Plan. The study will be conducted as follows:

✓ Mark the appropriate S.O.A.P class(es) (or Not applicable) for each sentence. Also feel free to give add any comments for annotations where you are unsure about assignment.

Read Me:

You are provided the section for this sentence and knowledge of surrounding sentences i.e. you may use the context of the report to assign the appropriate S.O.A.P class(es) for the provided sentence. Once you have decided the appropriate class(es), select the check box for class(es) in the row containing the sentence.

Feedback:

Once I have computed your agreement, I will contact you within one business day with results and provide feedback of your disagreements. We will set a time to settle these disagreements. While annotating, if you find a difficult case that you are unsure of and cannot resolve using the guidelines, please contact me at 412-728-1368 and we can resolve it at that point. Thank you!
**Possible Categories:**

**Subjective:**

*Subjective* statements include background or historical information that may be relevant to understanding the patient’s current or future clinical state. Examples of subjective information include information about the patient’s reason for coming to the emergency room, past medical, social and family history, and current symptoms. Table 1 further defines the category *subjective* by way of examples.

**Table 1. Subjective**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition and values (bold)</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Subjective** | Chief Complaint or Admitting Diagnosis: Reason for the encounter often conveyed in the patient’s or other non-medical professional’s own words. A previous *diagnosis given prior to the current visit.*  
History of Present Illness: Account of events, signs and symptoms that have taken place at the last point of care leading up to the current encounter.  
Review of Systems: An account of symptoms experienced prior or during the current visit related to several body systems. This list is elicited from the patient by the physician.  
Past Medical History: Prior signs, symptoms, illnesses, injuries, procedures, inactive or chronic conditions and disease experienced by the patient.  
Family History: A review of medical events, disease and hereditary conditions that may place the patient at risk for disease or the current condition.  
Social History: An age appropriate review of past and current activities that may place the patient at risk for disease or illness including occupation, education, substance use, marital status, housing, prior immunizations etc | Chief Complaint or Admitting Diagnosis:  
*CHIEF COMPLAINT:* shortness of breath  
Patient presents to Cardiac Service today with chest pain.  
**History of Present Illness:**  
Patient complains of worsening fatigue over the last two months.  
She was transferred from her long term care facility.  
Patient presents with history of chest pain for last three days.  
Denies cough.  
Reports frequent migraines  
**Review of Systems:**  
Review of system – noncontributory  
Abdomen: tender  
ROS: Negative otherwise specified in HPI.  
**Past Medical History:**  
PAST MEDICAL HISTORY: Diabetes and hypertension.  
Stroke in 1999.  
Underwent a CABG procedure 8 years |
Allergies: A list of known or unknown allergies that stimulate an allergic reaction.

Current Medication List: List of medications the patient is actively taking to manage their condition or disease state.

Misc: Includes reports of events that have taken place before or leading up to the current encounter or visit.

Family History:
- FAMILY HISTORY: None
- Mother is a breast cancer survivor.
- Family history of colon cancer.
- Daughter had similar flu-like symptoms last week.

Social History:
- SOCIAL HISTORY: Smokes 1 pack a day.
- Occasionally drinks alcohol.
- He works for a construction company as a demolition man.

Allergies:
- ALLERGIES - None
- ALLERGIES: PENICILLIN, BLOOD THINNERS.
- Patient has peanut allergy.

Current Medication List:
- The patient cannot tell me the name of her medications.
- The patient recently finished her Vicodin.
- MEDICATIONS: 1. Lanoxin.
**Objective**

Objective statements include observable, measurable or quantifiable information or data obtained from any of the following sources: past records, physical examinations, tests, procedures, screenings and other diagnostic techniques. These observations are often values obtained by the physician or another medical professional and do not include clinically reasoned diagnosis. Table 2 below contains definitions and examples.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition and values (bold)</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Objective** | Physical Examination: A general multi- or single system review conducted by the physician where objective data is observed and collected about the patient’s physical or mental state. Factual, quantifiable information that can be seen, smelled, heard, measured and quantified. Vital signs, **results** from examinations, consults, laboratory work, radiological studies, procedures, tests, screenings and other findings from other diagnostics. Includes results from outside resources such as past reports and medical records. | **Physical Examination:**  
- Physical Exam: Neck: Supple.  
- Temperature 36.7.  
**Results:**  
- The chest x-ray demonstrated his lungs are clear.  
- Biopsy show normal cell boundaries.  
- X-ray of the left thumb read by the radiologist as negative.  
- There was no evidence of a DVT seen. |
Assessment

Assessment statements include expressions or reporting of a diagnosis, impression or differential diagnosis by the dictating physician or clinical staff treating the patient. These statements often include verbs and phrases that convey the provider’s clinical thinking or medical decision making such as think, believe, am concerned, is possible, is consistent with, could be, rule out. These statements reflect the physician's, consult's, or clinical care provider’s evaluation based on the subjective and objective information gathered prior in the visit. Table 3 below contains definitions and examples.

Table 3. Assessment

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition and values (bold)</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>Medical Decision Making: Description of clinical thinking or deduction involved in deriving a diagnosis or impression. Statements that convey the provider’s impression of the patient’s diagnosis based on subjective and objective information gathered. Often stated with words like think, believe, concerned.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Differential Diagnosis: possible or probable diagnosis under consideration often denoted with words such as rule-out, possible, probable.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Often include discussion of impression or medical opinion regarding results of diagnostic tests etc that happened during the current visit. This may include discussion of unexpected or contradictory results as these relate to a differential diagnosis.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In the case of an Addendum: May describe a change in diagnosis due to new information or results.</td>
<td></td>
</tr>
</tbody>
</table>

Medical Decision Making:
- I think her pain is secondary to inflammation related to her puncture wound.
- Rule out: Cancer
- My suspicion of pulmonary embolism was low, based on the chest x-ray.
- Description of the headache is consistent with a migraine.
- I did believe that his pain was musculoskeletal as it was reproducible.
- I am not concerned for tenosynovitis at this point.
- There were some changes in inferior leads suggestive of possible old ischemia; however, they were not totally convincing at this time.

Diagnosis after study:
- ADMITTING DIAGNOSIS(ES): 1. ATYPICAL CHEST PAIN.
- FINAL DIAGNOSES: 1. Acute-on-chronic paranoid schizophrenia.
Plan

*Plan* statements include any reporting of care plans, treatment actions or education or follow-up procedures. Table 4 below contains definitions and examples.

**Table 4. Plan**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition and values (bold)</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Plan**       | Plan or Disposition: Include reporting of patients understanding of treatment, education, planned care of action, medications or follow-up procedures including appointments, referrals and discharge/transfer. Report of events that may **take place in the future** or that are hypothetical in nature. These statements are often noted with modal words such as *should, will, if, could etc.* Warnings or prognosis (i.e., consequences that could take place should the patient take or not take suggested actions). Anticipated gains from provided diagnosis or treatment in the future. | **Plan or Disposition:**  
• DISSCHARGE INSTRUCTIONS: 1. Continue all the present medications b.i.d.  
• He understood these instructions and was discharged in good condition.  
• DISPOSITION: Discharged to home in stable condition.  
• I will treat her symptomatically with Motrin for the pain.  
• She was treated with Compazine and Benadryl.  
• Patient received 45 minutes of critical care time.  
• We sent him to Cardiac Services.  
• Patient left against medical advice.  
**Suggestions or Warnings:**  
• Patient will suffer another heart attack if he chooses not to make suggested life style changes.  
• He was advised to return immediately to the hospital if he developed any shortness of breath  
**Hypothetical Events that may occur in the future:**  
• We did speak with the Hand Service who stated that they would be happy to see her sometime in the next week to evaluate the progress of this wound. |
### Not Applicable

*Not applicable* statements that do not fit into any of the antecedent classes. Table 5 below contains definitions and examples.

**Table 5. Not Applicable**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition and values (bold)</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Not Applicable</strong></td>
<td>Document conveys no clinical meaning or reporting of care. Statements of facts or documentation unrelated to providing any medical care.</td>
<td><strong>Documentation events not specific to clinical care</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• This patient was seen and examined by myself and Dr. <strong>NAME [YYY ZZZ]</strong>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Document electronically signed by: Derek Smith, MD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• SOCIAL HISTORY: Please see the resident’s dictation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ALLERGIES: (missing text)</td>
</tr>
</tbody>
</table>
Difficult Cases, Helpful Hints & Rules of Thumb...

With any classification task, there is going to be difficult cases that reside “in the gray”. In the case where the statement is not clearly one class, use your best judgment as well as the sections and other statements surrounding the sentence in the report. You may report more than one class.

👍 Subtle differences in examples:

- **Allergies: None**
  
  Mark as: Subjective
  
  vs

- **Allergies:**
  
  Mark as: Not applicable
  
  Reasoning: In the first case, the patient does not have allergies so this statement can be classified as Subjective; however, in the second case the section header stands alone and does not convey any meaningful information. The second case will be classified as Not applicable.

👍 Nesting Sources:

- The patient says that Dr. Smith diagnosed her with cancer in 1998.
  
  Mark as: Assessment, Subjective
  
  Reasoning: The statement expresses pertinent past medical history and also conveys that the doctor had made an assessment and committed to a diagnosis. This statement will be classified as Subjective and Assessment.

👍 Use your best judgment:

- The patient was given Rocephin 1 g IM empirically for possible pneumonia.
  
  Mark as: Assessment, Plan
  
  Reasoning: I would choose to classify this statement as an Assessment since the medication event is in the context of a differential diagnosis, however, there is a Plan element to describing the clinical event of administering a medication so also annotate as Plan. Again, use your best judgment.
• The patient was treated with tPA for a stroke two years ago.
  Mark as: Plan, Subjective
  The statement expresses pertinent past medical history and also conveys that the patient received a treatment plan for his or her condition several years ago.

Use the section to choose the class which follows in the report.

• Discharge Instructions: Transferred to **PLACE VA in stable condition.
  Mark as: Plan

  Reasoning: The condition of the patient is described in a plan for continuity of care.

• PAST MEDICAL HISTORY: Also heart disease.
  Mark as: Subjective

  Reasoning: While the sentence “Also heart disease” does not give you a clear understanding of which SOAP class to assign, the section header gives more context.

• ED COURSE: A one-inch mass was observed in an X-ray from **DATE[Jan] of 2006.
  Mark as: Objective, Subjective

  Reasoning: While the information was probably collected from a past report may be thought of as a statement of the patient’s past medical history (Subjective), the one inch mass is an interpretation of quantified or measured data from a diagnostic test, therefore, I would classify this sentence as Objective as well.

Use the statements around the sentence to help disambiguate the appropriate class (discourse segmentation). If I am assigning a SOAP class to the ambiguous statement in the red parenthesis...

• Patient was to be instructed to follow up with WPIC and continue using his anti-depression medication. [Please note, the patient left against our advice.] Ambiguous statement.
  Mark as: Plan
Reasoning: While this is an account of an event that took place during the current visit, use the previous statement to classify in the case of ambiguity i.e., chose the class of the segments around the ambiguous statement.
Thank you for your time and efforts!!

Definitions and descriptions were taken in part from:

2. \cluster1\home\nancy.clark\1 Training\EMR\SOAP Note.doc