

# A Toll on Tom

**Planning Notes:**

- 1) **Teams:** 4 students, selected by instructor
- 2) **Length:** 2-3 class periods (depending on length of class period and how much work is assigned for homework)
- 3) **Resources:** Student workbook; Computers/Internet for research, if available

**OVERVIEW:**

Tom is a middle-aged man who has worked as toll booth clerk for 29 years. He has joined a new medical group and has come for his yearly required physical exam for his employer. As Tom's medical team, can you identify Tom's health concerns and help him take steps toward a healthier lifestyle?

**GOAL:**

Gather subjective and objective information, determine the meaning of objective data, and use the data as evidence to form a logical conclusion.

**ROLE:**

You each will play a different role as members of a "health care home," a group of primary care providers who work together with patients and their families for healthy outcomes.

**OBJECTIVE:**

Obj. 2.10: Identify vital signs, measurements, and other objective information to make a simple diagnosis.

**DELIVERABLE:**

- 1) SOAP Note

**ASSESSMENT:**

All sections of the SOAP note (Subjective, Objective, Assessment, Plan) will be evaluated on a rubric.



**Require students to take time to share contact information and introduce themselves before getting started.**

**Health Care Provider Roles:**

Determine the role of each team member on the patient care team:

| Role                                | Description                                                                                                                                             | Team Member |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Nurse</b>                        | Takes vital signs and basic measurements when patient arrives; interviews patient on basic information; helps coordinate and communicate treatment plan |             |
| <b>Primary Care Physician (PCP)</b> | Asks additional questions; determines BMI and diagnosis; helps coordinate and communicate treatment plan                                                |             |
| <b>Dietician</b>                    | Asks additional questions about diet and nutrition; helps coordinate & communicate dietary component of treatment plan                                  |             |
| <b>Occupational Therapist (OT)</b>  | Asks additional questions about physical activity and mobility; helps coordinate & communicate physical activity component of treatment plan            |             |

**If students have access to technology in the classroom they can quickly look up what an occupational therapist is, as this will most likely be the only one they are not familiar with**

**Case Introduction:**

Read the following conversation between Tom and his wife, Sue:

"I just don't see why I have to get a physical every single year, Nothing changes," Tom complained to his wife, Sue.

Sue frowned. This was just like Tom to try to postpone any visit to a healthcare provider. "But Tom you know your employer requires a yearly physical. You've done it for 29 years, why do you have to complain every time?" Sue chided. Plus your new medical group is supposed to be great. It's a new "health care home" where they all work together to help us stay healthy."

"I'm just sick of the conversation about my weight," Tom said. "Every time those doctors just try to guilt trip me, but I have no idea what I can do to change things. My job keeps me on my bottom end all day and it's not like I can leave to get healthy food anywhere nearby."

"Well maybe this time it will be different. You should ask them what you can do to be healthier, given your circumstances," Tom's wife offered.

"I know what I *should* be doing--eating less, eating fruits and vegetables, exercising. It's not rocket science. I just don't think it will matter all that much. Plus I just don't see how those changes are practical in my life. They just don't get my situation!" exclaimed Tom, getting more irritated just thinking about his upcoming visit.

**Ask students: "How will you approach the patient after reading this conversation? How would health professionals normally pick up on the subtle factors like a patients' attitude or feelings? Why are these important to understand?"**

**Subjective & Objective:**

Prepare to ask Tom questions at his visit. The order of team members questions will proceed as follows: 1) Nurse; 2) Physician; 3) Dietician; 4) Occupational Therapist

**Each team member may ask one or more questions. For the sake of time it may be helpful to allow all students to ask only one questions each: all the nurses first, then physicians, etc. This will require students to listen carefully to one another's questions in order to not repeat questions.**

An actor should act as Tom. If additional actors are available, his wife could be present as well. This information should be studied by the "actor" (although it does not have to be strictly memorized, can hold the paper and refer to it as needed).

**SOAP Note**

**Subjective:**

|                                     |                                                                                                                                                  |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Signs & Symptoms                    | Concerns with weight (patient is visiting for routine physical)                                                                                  |
| Allergies                           | Peanuts                                                                                                                                          |
| Medications                         | Lipitor (for high cholesterol; has been taking for 5 y); Aspirin daily (taking for 10 y)                                                         |
| Past medical history                | Occupation: Toll booth worker (for years); very little movement/sedentary; Diabetes runs in his family; Smoked for 18 years (quit 15 years ago); |
| Last oral intake                    | Breakfast sandwich and Coke from McDonald's                                                                                                      |
| Events leading to injury or illness | n/a                                                                                                                                              |
| Frequency                           | n/a                                                                                                                                              |
| Associated Symptoms                 | Shortness of breath upon physical exertion                                                                                                       |
| Radiation                           | n/a                                                                                                                                              |
| Character                           | n/a                                                                                                                                              |
| Onset                               | n/a                                                                                                                                              |
| Location                            | n/a                                                                                                                                              |
| Duration                            | n/a                                                                                                                                              |
| Exacerbating Factors                | n/a                                                                                                                                              |
| Relieving Factors                   | n/a                                                                                                                                              |

**Objective:**

|              |                                                                                                                  |
|--------------|------------------------------------------------------------------------------------------------------------------|
| Measurements | Age: 61<br>Height: 6'0" and Weight: 290 lbs                                                                      |
| Vital Signs  | Pulse: 102 beats/min      Temp: 98.9 degrees Farenheit<br>Resp. rate: 21 breaths/min      Blood pressure: 170/90 |
| Exam Results | Fasting blood sugar: 82 mg/dl                                                                                    |
| Lab Results  | n/a                                                                                                              |

Remind students that they can refer to Lesson 2.8 to find the formula for calculating BMI.

**Diagnosis:**

Based on the patient's information, we determine that his BMI is: 39.3 which places him at a weight status of: obese.

Because of this, he may be at risk for the following health problems:

Students can use notes from class or research this in more depth online.

higher risk for gallstones, type 2 diabetes, high blood pressure, high cholesterol and triglycerides, coronary artery disease (CAD), a stroke, and sleep apnea, among other conditions.

**Research:**

Tom's treatment plan should consist of both diet and physical activity recommendations. His individual circumstances, characteristics, and preferences should be accounted for as well to ensure the goals are realistic and achievable. In the table below, research your assigned component of the plan:

| Role      | Treatment Area                                                                            | Treatment Plan                                                                                                                                                            |
|-----------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nurse     | General wellness: sleep, mental health, social health, safety                             | Students should use the knowledge from previous lessons (ex: Nutrients, MyPlate, FITT principle) and any additional resources online to determine an evidence-based plan. |
| PCP       | Medications, supplements, follow-up care, treatment options (procedures, surgeries, etc.) |                                                                                                                                                                           |
| Dietician | Diet and nutrition, sources of food, and eating habits                                    |                                                                                                                                                                           |
| OT        | Exercise, physical fitness, and mobility                                                  |                                                                                                                                                                           |

**Assessment:**

Summarize the information you determined for Tom’s diagnosis in the SOAP note Assessment section below. For the differential diagnosis in this case, write in the top three risks or health concerns you have for Tom, in addition to the main diagnosis of his weight status & BMI.

| <b>Assessment:</b>            |                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Summary</b>                | <div style="border: 1px solid black; padding: 5px; background-color: #e0e0e0;"> <p><b>Ex: Tom, a 61-year old toll-booth worker visiting for his annual physical, presents with obesity (borderline morbidly obese) and negative attitude toward trying to</b></p> </div>                                           |
| <b>Differential Diagnoses</b> | <ol style="list-style-type: none"> <li>1. <b>Other risks:</b></li> <li>2. <b>1) High blood pressure</b></li> <li>3. <b>2) Heart disease</b></li> <li>3. <b>3) Type II diabetes</b></li> </ol>                                                                                                                      |
| <b>Final Diagnosis</b>        | <p><i>Claim:</i> <b>Tom is morbidly obese and has high blood pressure.</b></p> <p><i>Evidence:</i> <b>Tom’s BMI is 29 and his BP is 150/90.</b></p> <p><i>Reasoning:</i> <b>Tom is extremely sedentary (due to his job and lifestyle). He also consumes a large quantity of soda daily and eats unhealthy.</b></p> |

**Plan:**

Summarize the comprehensive treatment plan for Tom in the SOAP note Plan section below. Be sure to provide realistic and appropriate recommendations and suggested healthy goals for Tom to set.

| Plan:                                                                                                                                            |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>Steps of Plan</b></p> <p><i>(Consider mental, social and physical health; short- and long-term needs, and follow-up care required)</i></p> |  |

**Ensure students address all treatment plan components from page 5**

**Rubric:**

You will be graded on the stated objective using the rubric below:

**Obj. 2.10: Identify vital signs, measurements, and other objective information to make a simple diagnosis.**

| <b>Needs Improvement</b>                                                                                                                                                                                                                                | <b>Emerging Mastery</b>                                                                                                                                                                                                                                                                                                                      | <b>Partial Mastery</b>                                                                                                                                                                                                                                                                          | <b>Mastery</b>                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vital signs and/or measurements are missing. BMI not calculated. Data is unorganized and not recorded with precision, clarity, and accuracy, and very little data is aligned within the appropriate section or category; much essential data is missing | Some vital signs are not accounted for or interpreted incorrectly. Some measurements are recorded and BMI is calculated, but multiple errors are present. Some data is organized and recorded with precision, clarity, and accuracy, and some data is aligned within the appropriate section or category; some essential data may be missing | Most vital signs are accounted for and interpreted correctly. All measurements are recorded and BMI is calculated, but one error may be present. Most data is organized and recorded with precision, clarity, and accuracy, and most data is aligned within the appropriate section or category | All vital signs are accounted for and interpreted correctly as high, low, or normal. All measurements are accurately recorded and used to calculate BMI. Other objective data is organized and recorded with precision, clarity, and accuracy. All data is aligned within the appropriate section or category. |



**Post-Case Wrap-up Questions:**

| Module 2 Learning Objectives:                                                                        |
|------------------------------------------------------------------------------------------------------|
| <b>Obj. 2.1:</b> Identify the three classes of nutrients.                                            |
| <b>Obj. 2.2:</b> Describe food’s journey through the digestive system.                               |
| <b>Obj. 2.3:</b> Analyze a food label to evaluate nutrition information.                             |
| <b>Obj. 2.4:</b> Analyze the nutrition concepts underlying the evolving national dietary guidelines. |
| <b>Obj. 2.5:</b> Identify persuasive techniques used in the marketing of food.                       |
| <b>Obj. 2.6:</b> Identify beverage choices that lead to negative health outcomes.                    |
| <b>Obj. 2.7:</b> Identify the components of fitness and the FITT principle.                          |
| <b>Obj. 2.8:</b> Calculate and interpret a person’s body mass.                                       |

ANSWER THE FOLLOWING QUESTIONS ON A SEPARATE SHEET OF PAPER.

**Obj 2.1:** Which specific nutrients should Tom focus on getting the most of in his diet? Why? Which should he get the least of?

**Obj 2.2:** Tom started to eat healthier and follow the recommendations from the dietician, but he noticed he started having more frequent bowel movements as a result. Explain to Tom why this might be happening, using your knowledge of the digestive system.

**Obj 2.3:** Tom is trying to decide if the following “mystery food” would be a healthy part of his new diet plan. What would you advise Tom? (Be sure to cite specific evidence).



**Obj 2.4:** Tom has started cooking large-quantity dinners on the weekends, so that he can warm up the food for dinner when he returns late at night from his shift. He is wondering if the meal options he is preparing will be healthy. Using the MyPlate recommendations, draw what a healthy dinner plate should look like for Tom, and explain why.

**Obj 2.5:** Tom saw a commercial for a nutrition bar that showed a young couple engaging in travel and adventurous activities and carrying the energy bars along with them wherever they go. He decided that buying the energy bar might encourage him to be more active and give him the energy he needs to do so. What persuasive technique(s) was/were this marketing advertisement using? Explain.

**Obj 2.6:** After his morning cup of coffee, Tom typically drinks 24 to 32 ounces of soda per day on the job. When he gets home he drinks a glass of milk with his meal and usually has a small glass of water when he goes to bed. Discuss the health effects of Tom's beverage choices with him, providing any recommendations of how he can improve his health through his choice of drinks.

**Obj 2.7:** Tom does not currently exercise. Write a brief fitness plan for Tom to get started on. Be sure it is realistic and addresses all aspects of the FITT principle.

**Obj 2.8:** If Tom lost 80 lbs over the next few years, what would his BMI be (use the same measurements for his height). What weight status would this place him in?