

**N311 Care Plan 1**

Sarah Minacci

Lakeview College of Nursing

N311: Foundations of Professional Practice

Clinical Instructor Name

September 27, 2023

### Demographics

|                                       |                                      |                                   |                                        |
|---------------------------------------|--------------------------------------|-----------------------------------|----------------------------------------|
| <b>Date of Admission</b><br>9/19/2023 | <b>Client Initials</b><br>KT         | <b>Age</b><br>66                  | <b>Gender</b><br>Female                |
| <b>Race/Ethnicity</b><br>Caucasian    | <b>Occupation</b><br>Nurse-Full Time | <b>Marital Status</b><br>Divorced | <b>Allergies</b><br>No Known Allergies |
| <b>Code Status</b><br>Full            | <b>Height</b><br>5'1''               | <b>Weight</b><br>270lbs           |                                        |

### Medical History

#### Past Medical History:

The client's past medical history includes arthritis, hyperlipidemia, hypertension, stage 1 chronic renal failure, flexural eczema, hypothyroidism, diverticulosis of the large intestine (without perforation or abscesses with bleeding), obesity, and hay fever.

#### Past Surgical History:

The client's past surgical history includes a right, total knee arthroplasty on 6/20/22, a colonoscopy on 11/19/2018, two cesarean sections, a tonsillectomy, and a fibula fracture surgery in 1995.

#### Family History:

The client had no reported family history of any diseases or conditions.

#### Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

The client states to have never smoked, does not use smokeless tobacco products, and does not use recreational drugs. Client also denies use of alcohol.

### **Admission Assessment**

**Chief Complaint:** The client was admitted to the hospital for elective surgery to address, as she said, “pain in my left knee that’s been going on for 20 years.”

### **History of Present Illness – OLD CARTS:**

The client stated that she has had a long history of chronic pain in her knees that has been “going on for 20 some years.” The pain is currently in her left knee, though she had a history of pain in her right knee as well that was resolved in June 2022, with a right total knee arthroplasty surgery. The client stated that the pain in her left knee occurred daily and intermittently throughout the day. The pain was described as “dull, achy, constant, bone on bone” which was severe enough that it, “made it difficult to get around”. The client stated that “walking around a lot made the pain worse” and the rest of her body “extra achy”, but other than the general achiness her symptoms stayed localized to her left knee. The client stated that sometimes over the counter medications would ease her knee pain, but she got “very little relief” from them. She had sought treatment before in June 2022 and received a total knee arthroplasty of her right knee and is currently in recovery for a total knee arthroplasty of her left knee.

### **Primary Diagnosis**

**Primary Diagnosis on Admission:** The primary medical diagnosis for this client is osteoarthritis of the left knee and to address this diagnosis she underwent a total left knee arthroplasty.

**Secondary Diagnosis (if applicable):** There is no secondary diagnosis for this client.

### **Pathophysiology**

Client, KT, presented to the hospital with a medical diagnosis of osteoarthritis of the left knee. Osteoarthritis is the deterioration of an individual's joints that is caused by aging (Capriotti, 2020). It is an inflammatory disease that is degenerative and slowly progresses (Capriotti, 2020). There are two types of osteoarthritis: primary and secondary (Cleveland Clinic, 2019). Primary osteoarthritis is the most common form and mainly affects the fingers, hips, knees, back, and big toe (Cleveland Clinic, 2019). Secondary osteoarthritis occurs when there is a pre-existing problem with a joint such as a sports-related injury, gout, or a genetic joint disorder (Cleveland Clinic, 2019). Either way however, the primary change that is occurring within the joints is the loss of articular cartilage, which is the flexible tissue between two joints that is very important for absorbing impactful forces (Capriotti, 2020). When the body experiences continued, excessive pressure on a joint, the articular cartilage in the joints wears away and loses its ability to cushion the joint (Capriotti, 2020). Furthermore, as the cartilage of the joint wears away, in an attempt to repair the cartilage, the body will release inflammatory mediators, such as cytokines, which cause inflammation and swelling of the joint (Capriotti, 2020). However, as osteoarthritis progresses, the cartilage is unable to be repaired and a loss of space between the joints occurs, eventually to the point where bone is exposed (Capriotti, 2020). These exposed bones then come into contact with each other, more inflammation occurs, and the joints become thickened (Capriotti, 2020). At the edge of where the cartilage of the joint is lost, osteophytes may also form (Capriotti, 2020). Osteophytes are bony projections that can pinch nerves and block blood supply to the joint (Capriotti, 2020). They are a classic indication of osteoarthritis and cause the individual pain (Capriotti, 2020).

Osteoarthritis is common in people over 40 years old and it is actually the primary cause of disability in the U.S (Capriotti, 2020). The risk factors for osteoarthritis include general aging, being obese, overuse or trauma of the joint, or having played sports for a long time (Capriotti, 2020). Common signs of osteoarthritis include obvious joint deformity, tenderness upon palpation, decreased range of motion, and swelling (Capriotti, 2020). The individual may also experience symptoms of general joint pain and swelling, more pain when the weather is cold, being extra stiff in the morning, changes in their normal gait, and a burning sensation (Capriotti, 2020). To diagnose osteoarthritis, a physician will need to gather a complete history of the individual's symptoms and perform a physical exam of their joints (Cleveland Clinic, 2019). An official diagnosis of osteoarthritis is confirmed with x-rays of the joint and will show a narrowed joint space and the presence of osteophytes (Capriotti, 2020).

### References

- Capriotti, T. (2020). Chapter 38: Degenerative Disorders of the Musculoskeletal System. In *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed., pp. 967–978). F.A. Davis.
- Cleveland Clinic. (2019, November 26). *Osteoarthritis*. Cleveland Clinic.  
<https://my.clevelandclinic.org/health/diseases/5599-osteoarthritis>

Vital Signs, 1 set – **HIGHLIGHT ALL ABNORMAL VITAL SIGNS**

| Time | Pulse  | B/P    | Resp Rate | Temp   | Oxygen |
|------|--------|--------|-----------|--------|--------|
| 0700 | 93 bmp | 137/69 | 17 bmp    | 97.6°F | 91%    |

Pain Assessment, 1 set (5 points)

| Time | Scale                     | Location  | Severity | Characteristics    | Interventions                                                                      |
|------|---------------------------|-----------|----------|--------------------|------------------------------------------------------------------------------------|
| 0606 | Numeric Rating Pain Scale | Left knee | 8/10     | “dull”<br>“aching” | 650mg Acetaminophen (every 4hrs PRN)<br>Hydrocodone-acetaminophen (every 6hrs PRN) |

Client pain was reassessed at 1100 with the Number Rating Pain Scale and client rated her left knee pain as a 4/10, “still achy, but better”. The clients pain was successfully reduced to her goal of a 5/10 or less.