# Mr. Bos – Case Description

**Patient Information:**  
Mr. Bos, 64 years old, residing in Capelle aan den IJssel, has a history of heart failure and experiences increasing chest pain during exertion (angina pectoris) despite being on optimized medication. This prompted the cardiologist to conduct further examinations, including a coronary angiogram.

During the coronary angiogram, the cardiologist discovered narrowing of the coronary arteries (atherosclerosis) and decided to perform an immediate angioplasty, placing two stents. Following the procedure, Mr. Bos remained in the hospital for several days for monitoring and adjustment of blood thinners. His wife visits him daily.

**Assessment Interview:**

**Pattern 1: Health Perception and Maintenance**

* **General Well-being:** Fatigued with minimal exertion. *"It's a shame that I can't go out anymore because of this."*
* **Expected Hospital Stay (According to Patient):** *"I came in for an examination, and now I have to stay longer. I don't know how long that will be."*
* **Returning Home After Discharge:** *"My wife takes care of everything at home, but maybe it will become too much, and we should explore other options."*
* **Allergies:** No known allergies.
* **Medication Use:**
  + 2x 20 mg furosemide, 2x 20 mg enalapril, 1x 200 mg metoprolol, Nitrospray (as needed)
* **Use of Stimulants:**
  + Never smoked, never used drugs, drinks alcohol in moderation (1-2 glasses before bedtime)

**Pattern 2: Nutrition and Metabolism**

* **Eating Habits:** Mr. Bos follows a cholesterol-restricted diet but finds it difficult to adhere to. He often snacks and enjoys good food. *"My wife is a great cook, and we enjoy eating together."*

**Pattern 3: Elimination**

* **Bowel Pattern:** Normal daily bowel movements.
* **Urinary Pattern:** Frequently gets up at night to urinate.

**Pattern 4: Activity**

* + **Living Situation:** Single-family house. With bed & bathroom: located upstairs.
* **Mobility:**
  + Independent indoors without assistive devices.
  + Uses his wife's help to climb stairs.
  + Uses a walker outside for support. *"At first, it was a big step for me, but now I'm glad I have it because I can still go for a walk when the weather is nice."*
* **Activities:**
  + Has limited ability to exert himself.
  + Mostly reads the newspaper, plays computer games, or watches TV.
  + Mrs. Bos takes care of household chores, the garden, the dog, and caring for her husband.
  + The couple used to enjoy cycling on weekends but no longer do so.
* **Personal Care:**
  + Wears compression stockings when he experiences fluid retention. His wife helps him put them on as it is too tiring for him. He is used to this help and prefers to keep it that way. His wife monitors his adherence to lifestyle rules, which he finds challenging to manage on his own.

**Pattern 5: Sleep and Rest**

* + Poor sleeper for years, partly due to frequent nighttime urination. Rests on the couch in the afternoon as going upstairs is too exhausting.

**Pattern 6: Perception and Cognition**

* + **Sensory Perception: Vision:** Uses glasses for farsightedness. **Hearing:** Uses hearing aids but sometimes forgets to wear them.
  + **Pain Level:** Chest pain score of 8/10.Pain decreases after using Nitrospray.

**Pattern 8: Roles and Relationships**

* + **Family Situation:** One son and daughter-in-law, two grandchildren.
  + **Social Life:** Mr. and Mrs. Bos spend most of their time at home and rarely go out.Due to the severity of Mr. Bos’s heart failure (NYHA-III), he no longer dares to drive. Mrs. Bos cannot drive long distances due to osteoarthritis in her knees. As a result, they are unable to visit their family in and around Amsterdam. They miss their children and grandchildren and are very sad about this.

**Pattern 9: Sexuality and Reproduction**

* **Impact of Illness on Sexual Functioning:** Not discussed.

**Pattern 10: Coping and Stress Tolerance**

* **Major Changes in the Past Two Years:** Physical decline leading to social limitations. His wife is his primary confident
* **Level of Stress:** *"Not being able to do everything frustrates me. We had envisioned our retirement differently. Sometimes I get angry about it, but it doesn't change anything, and it only makes me sad."*
* **Best Coping Mechanisms:** Reading, playing computer games, watching TV.
* **Need for Professional Support:** *"What can they really change?"*

**Pattern 11: Values and Beliefs**

**Life Philosophy:** Christian, but not actively practicing in recent years.

**Measurements:**

**Temperature:** 36.8°C **Pulse:** 92 bpm **Blood Pressure:** 165/90 mmHg **Respiratory Rate:** 20 breaths/min **Height:** 1.72 m **Weight:** 93 kg

**Additional Information**

In a conversation with the nurse, Mrs. Bos expressed concerns about the progression of her husband’s illness and her own limitations. She also sleeps lightly and is often woken up by Mr. Bos needing to use the restroom at night.

Mr. Bos often takes his diuretics later in the evening if he forgets to take them before dinner. Mrs. Bos monitors his medication intake, as she knows he is careless about it. She fears something serious could happen if he doesn’t take his medication on time.

Mr. and Mrs. Bos occasionally argue, often because Mrs. Bos feels she has to handle everything alone. Mr. Bos does not know how to respond and tends to ignore it when she gets upset. Mrs. Bos, in turn, does not know how to handle these situations.

Mrs. Bos also feels guilty toward her husband. Not only does she get angry quickly, but on some days, she is unable to do anything due to knee pain and feelings of listlessness. She feels powerless because she is also tired and in pain. She worries about who will take care of her husband in the future and what will happen to her in the coming years. She sees the future as bleak and worries a lot but does not want to burden her husband with her thoughts. She believes he is struggling enough already.

# Nursing diagnoses according to chatGPT

**1. Decreased Cardiac Output (00200)**

**Related to:**

* Myocardial ischemia (coronary artery disease, recent angioplasty with stent placement)
* Increased afterload (hypertension: BP 165/90 mmHg)
* Ventricular dysfunction (history of heart failure, NYHA III classification)

**Evidenced by:**

* Chest pain (score 8/10, relieved by Nitrospray)
* Fatigue with minimal exertion
* Activity intolerance
* Nocturnal dyspnea (frequent urination at night suggests fluid retention)

**2. Activity Intolerance (00092)**

**Related to:**

* Decreased oxygen supply to tissues due to heart failure
* Fatigue and dyspnea with exertion
* Limited mobility (uses a walker outdoors, requires assistance for stairs)

**Evidenced by:**

* *"I get tired with the slightest effort."*
* Uses a walker for support and to rest while walking
* Reduced participation in former activities (e.g., cycling, social outings)
* Spends most of the day sitting or lying down

**3. Ineffective Health Maintenance (00078)**

**Related to:**

* Difficulty adhering to dietary restrictions (cholesterol-restricted diet but struggles to follow it)
* Medication nonadherence (forgets diuretics, wife manages medication)
* Lack of engagement in self-care management (wife oversees medical regimen and lifestyle adherence)

**Evidenced by:**

* *"My wife keeps track of my medications because I forget."*
* *"I find it difficult to follow all the lifestyle rules."*
* Poor dietary control (*"I love good food, and my wife cooks very well."*)

**4. Ineffective Peripheral Tissue Perfusion (00204)**

**Related to:**

* Impaired blood flow due to atherosclerosis
* Fluid retention leading to venous congestion

**Evidenced by:**

* Uses compression stockings for leg edema
* Reports difficulty putting on compression stockings (requires assistance)

**5. Disturbed Sleep Pattern (00198)**

**Related to:**

* Nocturia (frequent urination at night due to diuretic use and heart failure)
* Chronic pain and discomfort (chest pain, fatigue)

**Evidenced by:**

* *"I have been a bad sleeper for years."*
* Wakes up frequently at night
* Requires daytime naps due to sleep deprivation

**6. Caregiver Role Strain (00061) – For Mrs. Bos**

**Related to:**

* Physical limitations of the caregiver (knee osteoarthritis, chronic pain, fatigue)
* Increased caregiving responsibilities (monitoring medications, assisting with ADLs)
* Emotional burden (worrying about husband's health, feeling unsupported)

**Evidenced by:**

* *"Sometimes I feel like I have to do everything alone."*
* *"I worry about what will happen to my husband and who will take care of him."*
* Feelings of guilt and frustration about caregiving responsibilities

**7. Risk for Falls (00155)**

**Risk Factors:**

* Use of diuretics (potential for dizziness, orthostatic hypotension)
* Decreased mobility (uses a walker outdoors, requires assistance on stairs)
* General fatigue and weakness

**8. Social Isolation (00053)**

**Related to:**

* Reduced mobility (cannot drive due to heart failure, wife has limited driving ability)
* Distance from family (children and grandchildren live in Amsterdam, infrequent visits)
* Emotional distress (sadness over not seeing family)

**Evidenced by:**

* *"We hardly go out anymore."*
* *"We miss our children and grandchildren and are very sad about it."*

**9. Ineffective Coping (00069)**

**Related to:**

* Chronic illness progression
* Loss of independence and ability to participate in former activities
* Emotional distress related to unmet expectations for retirement

**Evidenced by:**

* *"We had imagined our retirement differently."*
* *"Sometimes I get angry, but it doesn’t change anything—it just makes me sad."*
* Denial or reluctance to seek professional support (*"What can they really change?"*)

**10. Readiness for Enhanced Family Coping (00064)**

**Evidenced by:**

* Mr. and Mrs. Bos express concern for each other’s well-being
* Mrs. Bos actively manages her husband’s medications and care needs
* Expressed desire to explore home support options (*"Maybe we should see what’s possible."*)

# Nursing Care plan (NNN) according to chat gpt

## **1. Decreased Cardiac Output (00200)**

**NOC Outcomes:**

* **Cardiac Pump Effectiveness (0400)**
* **Tissue Perfusion: Cardiac (0401)**
* **Vital Signs Status (0802)**

**NIC Interventions:**

* **Cardiac Care: Acute (4040)** – Monitor heart sounds, ECG, and blood pressure regularly.
* **Medication Management (2380)** – Administer prescribed cardiac medications (e.g., diuretics, beta-blockers) and monitor for effectiveness.
* **Energy Management (0180)** – Encourage rest periods and avoid overexertion.
* **Patient Education: Medication (5616)** – Teach the patient and caregiver about proper medication timing and adherence.

## **2. Activity Intolerance (00092)**

**NOC Outcomes:**

* **Activity Tolerance (0005)**
* **Energy Conservation (0011)**

**NIC Interventions:**

* **Energy Management (0180)** – Encourage alternating activity with rest.
* **Exercise Therapy: Ambulation (0221)** – Support safe ambulation, including the use of a walker.
* **Self-Care Assistance (1800)** – Assist with ADLs as needed, focusing on patient independence.
* **Patient Education: Prescribed Activity (5613)** – Teach the patient about safe activity levels.

## **3. Ineffective Health Maintenance (00078)**

**NOC Outcomes:**

* **Health Beliefs & Behavior (1602)**
* **Adherence Behavior: Prescribed Diet (1633)**
* **Adherence Behavior: Medication (1631)**

**NIC Interventions:**

* **Health Education (5510)** – Educate about heart failure management, including dietary restrictions.
* **Medication Management (2380)** – Address forgetfulness with strategies (e.g., pill organizer).
* **Nutritional Counseling (5246)** – Support adherence to a cholesterol-lowering diet.

## **4. Ineffective Peripheral Tissue Perfusion (00204)**

**NOC Outcomes:**

* **Peripheral Circulation Status (0402)**
* **Tissue Perfusion: Peripheral (0403)**

**NIC Interventions:**

* **Peripheral Sensation Management (2660)** – Assess for signs of poor circulation (e.g., edema, discoloration).
* **Compression Therapy (4064)** – Encourage proper use of compression stockings.
* **Positioning: Neurologic (0842)** – Elevate legs to reduce edema.

## **5. Disturbed Sleep Pattern (00198)**

**NOC Outcomes:**

* **Sleep (0004)**
* **Rest (0003)**

**NIC Interventions:**

* **Sleep Enhancement (1850)** – Promote good sleep hygiene, including reducing nighttime fluid intake.
* **Environmental Management: Comfort (6482)** – Encourage a relaxing sleep environment.
* **Patient Education: Sleep Enhancement (5618)** – Teach strategies to improve sleep quality.

## **6. Caregiver Role Strain (00061)**

**NOC Outcomes:**

* **Caregiver Emotional Health (2508)**
* **Family Coping (2600)**

**NIC Interventions:**

* **Caregiver Support (7040)** – Provide emotional support and suggest respite care options.
* **Coping Enhancement (5230)** – Teach stress management techniques.
* **Family Process Maintenance (7110)** – Encourage communication about role strain.

## **7. Risk for Falls (00155)**

**NOC Outcomes:**

* **Fall Prevention Behavior (1909)**
* **Mobility (0208)**

**NIC Interventions:**

* **Fall Prevention (6490)** – Ensure a safe home environment, including adequate lighting.
* **Exercise Promotion: Balance (0202)** – Encourage light strengthening exercises.
* **Assistive Device Use (1810)** – Educate about safe walker use.

## **8. Social Isolation (00053)**

**NOC Outcomes:**

* **Social Involvement (1502)**
* **Family Support (2603)**

**NIC Interventions:**

* **Socialization Enhancement (5100)** – Encourage virtual family meetings or community support groups.
* **Support Group Facilitation (5440)** – Suggest participation in a local or online cardiac support group.
* **Coping Enhancement (5230)** – Address emotional distress due to isolation.

## **9. Ineffective Coping (00069)**

**NOC Outcomes:**

* **Coping (1302)**
* **Emotional Resilience (1205)**

**NIC Interventions:**

* **Emotional Support (5270)** – Encourage expression of feelings regarding illness and limitations.
* **Decision-Making Support (5250)** – Help explore options for home modifications or additional care support.
* **Counseling (5240)** – Refer to a mental health professional if needed.

## **10. Readiness for Enhanced Family Coping (00064)**

**NOC Outcomes:**

* **Family Coping (2600)**
* **Family Functioning (2602)**

**NIC Interventions:**

* **Family Support (7140)** – Strengthen support strategies among family members.
* **Teaching: Family (5614)** – Educate about heart failure management and caregiving roles.
* **Respite Care (7266)** – Provide information on available respite care services.

The nursing diagnoses, outcomes, and interventions I provided are based on the most recent editions of the NANDA-I, NOC, and NIC taxonomies available in my training data. Here are the latest editions:

1. **NANDA International (NANDA-I) Nursing Diagnoses**:
   * **Edition**: **12th Edition**
   * **Publication Year**: **2021-2023**
2. **Nursing Outcomes Classification (NOC)**:
   * **Edition**: **6th Edition**
   * **Publication Year**: **2018**
3. **Nursing Interventions Classification (NIC)**:
   * **Edition**: **7th Edition**
   * **Publication Year**: **2018**