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## Preparing Patients for Discharge After Orthopedic Surgery: Nursing Considerations

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### Abstract:

Discharge planning for orthopedic surgery patients is a critical process that begins at admission and continues through recovery. Nurses play a pivotal role in ensuring that patients are well-informed and prepared for their transition from hospital to home. This preparation involves assessing patients' physical and emotional needs, educating them about their surgical procedure, and discussing post-operative care plans, including pain management and mobility restrictions. Effective communication is key: nurses should provide clear instructions regarding medications, wound care, and signs of complications that require immediate attention. It's also important to evaluate the patient's home environment to ensure it's safe and conducive to recovery, potentially recommending adaptations such as grab bars or a clear pathway to reduce fall risks. In addition to medical preparation, nurses must also address the psychosocial aspects of discharge. Patients may experience anxiety or uncertainty about managing their recovery independently. Providing emotional support and encouraging family involvement can greatly enhance a patient's confidence. Additionally, scheduling follow-up appointments and arranging for physical therapy can ensure continuity of care. It's vital for nurses to assess the patient's understanding of all discharge instructions and reinforce the importance of adhering to these guidelines. This comprehensive approach not only promotes successful recovery but also fosters a collaborative relationship between patients and healthcare providers, ultimately leading to better outcomes.

**Keywords:** discharge planning, orthopedic surgery, nursing considerations, patient education, post-operative care, pain management, mobility restrictions, home assessment, psychosocial support, follow-up appointments, continuity of care.

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### Introduction:

Orthopedic surgery is a critical branch of medicine that addresses disorders related to the musculoskeletal system, involving bones, muscles, joints, and ligaments. Moreover, as the population ages and the prevalence of musculoskeletal conditions increases, the volume of orthopedic surgeries continues to rise significantly, making effective postoperative care essential. Discharge planning is a vital aspect of the overall postoperative process, as it directly affects patient recovery, health

outcomes, and satisfaction with care. Effective discharge preparation requires careful consideration of multifaceted factors, including the physical and psychological needs of the patient, supply of necessary resources, and the continuity of care post-discharge, all of which are fundamental roles of nursing practice. This research introduction will explore the critical nursing considerations involved in preparing patients for discharge after orthopedic surgery, highlighting effective strategies to enhance

recovery, minimize complications, and promote successful reintegration into daily life [1].

Postoperative recovery following orthopedic surgery is often complex and multifaceted, given the nature of procedures ranging from joint replacements to fracture repairs. As such, patients may experience limitations in mobility, pain management challenges, and the need for rehabilitation services. Effective discharge planning is not solely about ensuring readiness for release from the healthcare facility; it encompasses the comprehensive preparation of patients to manage their recovery independently at home. Nurses play a pivotal role in this process, serving as the primary point of contact for patients and their families. Their responsibilities extend well beyond clinical tasks; they are instrumental in patient education, assessment of individual needs, and coordination of resources to streamline recovery transitions [2].

Research indicates that improper discharge planning can lead to unnecessary complications, heightened rates of readmission, and increased healthcare costs. Moreover, postoperative complications can significantly impede the recovery journey and diminish the quality of life. As a result, nursing considerations during discharge preparation must focus on comprehensive education regarding postoperative care, medication management, signs of potential complications, and available support systems, including physical therapy services and community resources. By addressing these critical aspects, nurses can empower patients to take an active role in their recovery while fostering confidence in managing their postoperative care at home [3].

Moreover, addressing psychological considerations is equally essential in discharge planning. Many patients undergoing orthopedic surgery may experience anxiety, fear, or depression related to pain management, mobility limitations, or overall recovery. Nurses must consider these emotional aspects during the discharge process, utilizing effective communication and supportive interventions to enhance patients' psychological resilience and confidence post-surgery. This includes offering resources for mental health support, providing reassurance, and encouraging open dialogue about any concerns that patients may have regarding their recovery [4].

In addition to direct patient education and support, effective discharge planning necessitates

multidisciplinary collaboration. Engaging a team of healthcare professionals, including physical therapists, social workers, and nutritionists, can significantly enhance the discharge process by ensuring that all aspects of the patient's recovery are considered. Such collaboration reinforces a holistic approach to care, addressing physical, emotional, and socioeconomic factors that impact postoperative outcomes. The integration of these various perspectives can lead to improved discharge plans, tailored resources, and enhanced overall satisfaction for patients [5].

### **Nursing Roles and Responsibilities in Discharge Preparation:**

Discharge preparation is a crucial phase in the patient care continuum that impacts both patient recovery and healthcare system efficiency. Nurses play a vital role in ensuring that this transition is smooth, safe, and efficient. The discharge process involves much more than simply sending a patient home; it encompasses comprehensive planning and education to facilitate continuity of care [6].

Discharge planning is a methodical approach to anticipating and managing a patient's transition from the hospital to home or another care setting. Effective discharge planning aims to minimize the risk of readmission, improve patient satisfaction, and enhance the quality of life. This intricate process involves collaboration among various healthcare team members, including physicians, social workers, dietitians, and pharmacists; however, the nursing staff often acts as the linchpin in coordinating these efforts [7].

The discharge process begins with a thorough assessment of the patient's needs, which is a primary responsibility of nursing professionals. Nurses are trained to evaluate multiple dimensions of a patient's health, including their medical condition, psychological state, social support systems, and potential barriers to self-care at home. By performing comprehensive assessments, nurses gather valuable information that helps in creating an individualized discharge plan tailored to the unique needs of each patient [8].

One of the most significant roles of nurses in discharge preparation is patient education. Educating patients about their diagnosis, treatment options, medication management, and necessary lifestyle modifications is crucial for successful recovery post-discharge. Nurses employ clear,

approachable language to ensure that patients and their families understand critical information. The use of teaching tools, such as pamphlets, videos, or demonstrations, can enhance comprehension and retention [9].

Furthermore, assessing the level of health literacy is an important aspect of discharge education. Nurses must recognize whether patients can comprehend medical jargon and instructions. When necessary, they should adapt their teaching strategies accordingly—this may involve simplifying medical terminology, using visual aids, or providing additional written resources for the patient to take home [10].

Nurses also play a key role in coordinating follow-up care and ensuring that patients have access to the necessary resources after discharge. This responsibility includes scheduling follow-up appointments, arranging for home health services when needed, and providing prescriptions. They must ensure that patients understand the significance of these appointments and follow-up plans. Often, nurses will communicate with outpatient healthcare providers to ensure that the continuum of care is maintained [11].

Additionally, nurses are instrumental in creating and distributing discharge instructions that outline critical information such as symptoms to report, medication timelines, activity restrictions, dietary recommendations, and lifestyle modifications. A well-structured discharge summary can serve as a critical communication tool that bridges care from hospital to home [12].

The discharge process requires an awareness of a patient's socioeconomic background and cultural context. Nurses are tasked with identifying potential challenges that may affect a patient's ability to follow discharge instructions. This can include financial constraints, access to transportation, language barriers, or cultural beliefs about healthcare. For instance, patients lacking financial means may find it challenging to afford medications or follow-up care. A nurse must connect patients to appropriate community resources, social services, and support systems that can assist in overcoming these obstacles [13].

In addition to physical and educational aspects of care, discharge preparation often involves addressing the emotional and psychological components of recovery. Hospital stays can be

unsettling and overwhelming, and many patients may experience anxiety about their health status or concerns regarding their ability to self-manage their condition at home. Nurses provide essential emotional support and counseling, helping patients articulate their fears and making them feel more empowered. This supportive role contributes significantly to a patient's confidence in managing their health after discharge [14].

Safety is a paramount concern during discharge preparation. Nurses have the responsibility to ensure that patients are not only well-informed but also capable of safely managing their health conditions post-discharge. This involves evaluating the patient's home environment to identify potential safety hazards and recommending modifications as necessary. By addressing factors such as mobility issues, medication management, and potential for falls, nurses can significantly reduce the risk of post-discharge complications [14].

#### **Assessment of Patient Needs Pre- and Post-Surgery:**

The surgical journey of a patient does not merely begin in the operating room or end with discharge from the hospital. Instead, it encompasses a continuum of care that considers the multifaceted needs of the patient before, during, and after the surgical procedure. Pre-operative and post-operative assessment of patient needs are vital components of this continuum, guiding healthcare professionals in delivering tailored interventions that maximize the chances of successful outcomes. Understanding the complexity of patient needs, including physical, emotional, and social dimensions, is critical for ensuring both patient safety and satisfaction [15].

#### **Pre-Surgery Assessment**

Pre-operative assessment is a systematic approach to evaluating how prepared a patient is for surgery. This phase influences perioperative management, including the surgical plan, anesthetic considerations, and post-operative care.

##### **1. Medical History and Physical Examination**

The foundation of pre-surgical assessment typically includes a thorough medical history and physical examination. Healthcare providers should gather comprehensive data regarding existing medical conditions, previous surgeries, allergies, current medications, and family health history, all of which

contribute to understanding the patient's baseline and potential surgical risks. An examination might reveal critical factors such as vital signs, cardiovascular health, and presence of comorbidities which could complicate the surgical process [15].

## **2. Risk Assessment and Stratification**

Following the initial evaluation, healthcare providers employ risk assessment tools to stratify patients based on their individual risk profiles. Various scoring systems, such as the American Society of Anesthesiologists (ASA) Physical Status Classification System, can help in categorizing the patient's overall health status. Patients classified as ASA II or higher require more extensive evaluation and possible optimization of their medical condition prior to surgery. For example, a diabetic patient may need to achieve better glycemic control to reduce surgical complications [15].

## **3. Nutritional Assessment**

Nutritional status plays a crucial role in determining both surgical outcomes and recovery. Nutritional assessments to determine the adequacy of a patient's diet, body mass index, and any signs of malnutrition can initiate therapeutic interventions. Patients identified as malnourished may benefit from nutritional support pre-operatively, which may positively influence their healing process and immune response following surgery [16].

## **4. Psychosocial Considerations**

In addition to physical health, assessing psychosocial factors is vital. Understanding a patient's emotional state, anxiety levels, social support systems, and financial considerations can profoundly impact their surgical experience and recovery. Healthcare professionals can utilize various psychological assessment tools and screenings to identify patients who may exhibit high levels of pre-operative anxiety. These patients may require counseling or intervention to manage fear and expectations surrounding surgery, thereby enhancing their willingness to comply with post-operative care [16].

## **5. Patient Education and Informed Consent**

An essential component of the pre-operative phase is patient education. Properly informing patients about surgical procedures, anticipated outcomes, potential complications, and recovery protocols

helps to build trust and reduce anxiety. Informed consent is not merely a legal requirement; it is a key element of shared decision-making that empowers patients to make informed choices regarding their healthcare [17].

## **Post-Surgery Assessment**

Post-operative assessment begins immediately after the surgical procedure and focuses on evaluating the patient's recovery and identifying any complications. The initial post-operative period is critical, as this is when patients are most susceptible to adverse effects from anesthesia and surgical interventions [17].

### **1. Monitoring Physical Recovery**

Effective monitoring involves periodic assessments of vital signs, wound condition, pain levels, and the presence of any post-surgical complications. Health professionals utilize systematic approaches, such as the post-anesthesia care unit (PACU) protocols, to ensure patients transition safely from anesthesia to recovery. This phase is essential for identifying complications such as infection, excessive bleeding, or thrombosis early [17].

### **2. Pain Management**

Post-surgical pain management must be standardized based on the type of surgery performed, patient's previous pain experiences, and personal preferences. Effective pain management not only improves patient comfort but can also facilitate earlier mobilization and thereby prevent complications such as pneumonia or pressure ulcers. Multimodal analgesia strategies may be employed, including non-opioid analgesics, regional anesthetics, and adjunctive therapies, to achieve optimal pain control while minimizing opioid use [18].

### **3. Assessment of Psychological and Emotional Well-Being**

Just as pre-operative psychological assessments are crucial, post-operative evaluations of mental health must also be prioritized. The experience of surgery can lead to emotional fluctuations, including anxiety, depression, or post-traumatic stress disorder in some patients. Screening tools can help identify patients who may need further mental health

support or counseling services, facilitating timely interventions that enhance recovery [18].

#### 4. Functional Recovery and Rehabilitation

Assessing patients' functional status post-surgery is vital to establish a baseline for rehabilitation. Understanding individual physical capabilities post-operatively can allow healthcare teams to develop personalized rehabilitation programs that support mobility and independence. Such programs may involve physiotherapy, occupational therapy, and gradual resumption of activities tailored to the patient's surgical procedure and unique circumstances [19].

#### 5. Discharge Planning and Education

Successful discharge planning is a critical component of post-operative assessment. Healthcare providers should offer clear instructions regarding home care, medication management, activity restrictions, and when to seek medical help. An effective discharge education program, which may include printed materials and follow-up appointments, reduces the likelihood of readmission and fosters patient confidence in their self-care abilities [20].

#### The Importance of Interprofessional Collaboration

The assessment of patient needs remains an ongoing process that demands collaboration among professionals across various disciplines. Surgeons, anesthesiologists, nurses, pharmacists, nutritionists, and social workers must work as a cohesive unit to ensure that patient needs are holistically addressed. This interprofessional teamwork is essential for minimizing gaps in communication, improving patient outcomes, and fostering a culture of safety within healthcare settings [21].

#### Patient Education: Key Components and Strategies:

Orthopedic surgery represents a significant area of healthcare focused on the diagnosis and treatment of musculoskeletal disorders. These disorders can involve bones, joints, ligaments, tendons, and muscles and often lead to considerable functional impairment and diminished quality of life. The success of orthopedic surgical interventions heavily relies not only on the technical expertise of the surgeon but also on informed patient engagement during the postoperative phase. Effective patient

education is crucial in ensuring that patients understand their role in recovery, recognize the signs of complications, and adopt healthy practices that promote healing [22].

#### Key Components of Patient Education

- 1. Understanding the Surgical Procedure:**  
After orthopedic surgery, patients should be well-informed about the specifics of their surgical procedure, including what was done during the operation and why it was necessary. This foundational knowledge helps alleviate anxiety and fosters a sense of control over their recovery process. Healthcare providers can use anatomical models or diagrams to visually explain the surgery and its health implications, thereby improving patient comprehension [22].
- 2. Postoperative Care Instructions:**  
Clear and comprehensive postoperative care instructions are paramount for a successful recovery. These instructions often include medication management, wound care, activity restrictions, and signs of potential complications. Educating patients on proper wound care, such as keeping the area clean and recognizing signs of infection, is vital in preventing postoperative complications. In addition, patients should be advised on dietary considerations to facilitate healing, with a focus on nutrients that contribute to bone and soft tissue repair [23].
- 3. Pain Management Techniques:**  
Pain management is a critical aspect of recovery that directly impacts patient satisfaction and engagement in rehabilitation activities. Patients need to be informed about pain expectations post-surgery, appropriate pain relief strategies, and the correct use of prescribed medications. Providing education about the importance of adhering to a pain management schedule can also help patients maintain consistent comfort levels, allowing them to participate actively in their rehabilitation process [24].
- 4. Physical Rehabilitation:**  
Postoperative rehabilitation is essential for restoring mobility, strength, and function.

Patients should be educated about the significance of engaging in prescribed physical therapy exercises and the potential benefits they can deliver. This education should include guidance on when to start physical therapy, the expected progress in the rehabilitation process, and the importance of adhering to the prescribed home exercise program. Knowledge of what to expect in terms of recovery milestones can help motivate patients and reduce frustration throughout their rehabilitation journey [24].

5. **Lifestyle Modifications:**

For many patients, orthopedic surgery may necessitate changes in daily activities and lifestyle habits. Understanding the importance of modifying daily activities to accommodate healing is essential. This may include advice on avoiding certain movements, using assistive devices when necessary (e.g., crutches or walkers), and gradually returning to regular activities. Education on the importance of ergonomic practices at home or work can also assist in preventing re-injury [25].

6. **Understanding Complications and When to Seek Help:**

Patients should be made aware of the potential complications following orthopedic surgery and the signs that indicate the need for immediate medical attention. Educating patients about symptoms such as excessive swelling, increased pain, fever, or changes in color or temperature of the affected extremity can empower them to seek appropriate help and facilitate early intervention, which can significantly impact overall outcomes [25].

### Strategies for Effective Patient Education

1. **Utilizing Multiple Educational Formats:**

Different patients absorb information in different ways. Providing patient education through multiple formats, such as verbal instructions, printed materials, instructional videos, and interactive demonstrations, can enhance comprehension and retention of information. Materials should be tailored to meet the educational needs of diverse patient populations, including

considerations for language barriers, health literacy levels, and cognitive abilities [26].

2. **Creating a Supportive Environment:**

The postoperative hospitalization period is an ideal time for patient education, but the environment must be supportive and conducive to learning. Healthcare providers should ensure that patients feel comfortable asking questions and expressing concerns. Establishing rapport with patients can foster a sense of trust and willingness to engage in their own health management [26].

3. **Involving Family Members and Caregivers:**

Involving family members and caregivers in the education process is crucial, particularly for patients who may require assistance during their recovery. Providing information sessions that include both the patient and their support system can help ensure that all parties understand the care plan, which can facilitate compliance and recovery success. Engaging the family also helps in monitoring and encouraging adherence to rehabilitation protocols [27].

4. **Follow-Up and Feedback:**

Continuous assessment of patient understanding and progress is essential in addressing any educational gaps. Scheduling follow-up appointments or calls after discharge can provide an opportunity to reinforce key concepts and clarify any lingering questions. Encouraging feedback from patients about the educational materials and strategies used can help healthcare teams refine their approaches to better meet patient needs in the future [27].

5. **Utilizing Technology and Digital Health Tools:**

In today's digital age, technology can play an influential role in patient education. Mobile applications, patient portals, and telehealth services can offer patients access to educational resources, appointment reminders, progress tracking, and direct communication with healthcare providers. These tools can enhance engagement and facilitate the timely exchange of

information, all of which are beneficial in the recovery process [28].

### **Pain Management and Medications: Safe Transition to Home:**

The transition from a hospital or clinical setting to home can be a significant and vulnerable time for patients, particularly those who have undergone surgery, suffered an injury, or are managing chronic pain conditions. Effective pain management is crucial during this period as it directly influences recovery, functionality, and overall quality of life. Understanding pain management strategies and medication safety is essential for ensuring a smooth transition home and preventing complications associated with inadequate pain control or improper medication use.

#### **The Importance of Pain Management**

Pain is a complex and subjective experience that varies significantly among individuals. Effective pain management is an integral aspect of patient care, particularly for those transitioning from hospital to home. The primary goals of pain management include:

1. **Relieving Pain:** Alleviating discomfort to promote healing and enhance quality of life.
2. **Enhancing Functionality:** Allowing patients to participate in daily activities, including physical rehabilitation, which can contribute to faster recovery [29].
3. **Reducing Anxiety and Stress:** Managing pain effectively can mitigate the fear and anxiety often associated with recovery.

Pain can be categorized into acute and chronic types, with each requiring different management strategies. Acute pain typically results from surgery or trauma and is usually short-term. Chronic pain, on the other hand, persists over time and may require ongoing management. Understanding the nature of a patient's pain is essential in tailoring a pain management plan that is safe and effective [29].

#### **Pain Management Strategies**

Pain management strategies can be broadly classified into pharmacologic and non-pharmacologic methods [30].

#### **Pharmacologic Approaches**

Medications are often the cornerstone of pain management. The selection of appropriate medications depends on factors such as the type and severity of pain, patient history, and potential side effects. Common categories of pain medications include:

- **Non-Steroidal Anti-Inflammatory Drugs (NSAIDs):** Medications such as ibuprofen and naproxen are commonly used for mild to moderate pain and have anti-inflammatory properties. They are often recommended for managing postoperative pain and managing chronic conditions like arthritis [30].
- **Acetaminophen:** Often used as a first-line treatment for mild to moderate pain, acetaminophen is generally safe when used as directed but may pose risks when taken at high doses or with alcohol.
- **Opioids:** Stronger pain relievers, including morphine, oxycodone, and hydrocodone, are prescribed for more severe pain, especially post-surgery. While effective, they carry the risk of dependence and potential for overdose, requiring careful management and monitoring [30].
- **Adjuvant Medications:** Certain medications that are not primarily pain relievers, such as certain antidepressants and anticonvulsants, can be effective for specific types of pain, particularly neuropathic pain.

#### **Non-Pharmacologic Approaches**

In addition to medications, various non-pharmacologic strategies can aid in pain management. These may include:

- **Physical Therapy:** Tailored exercise programs designed to improve strength, flexibility, and function can significantly alleviate pain and enhance recovery [31].
- **Cognitive Behavioral Therapy (CBT):** CBT and other psychological interventions can help patients manage pain by altering the perception of pain and developing coping strategies.
- **Complementary Therapies:** Techniques such as acupuncture, massage, and

mindfulness meditation can also play a role in pain management and should be discussed with healthcare providers [31].

### Safe Transition to Home

The transition from a healthcare facility to home presents unique challenges in pain management and medication safety. To ensure a successful transition, several key considerations must be taken into account [32].

One of the most critical steps in the transition process is medication reconciliation. This involves reviewing the patient's current medications and any changes made during the hospital stay. Patients should receive a clear and comprehensive list of the medications they need to take at home, including dosage instructions, frequency, and potential side effects.

Healthcare providers should engage patients and caregivers in this conversation, ensuring they understand how to manage their medications safely. The importance of adhering to prescribed medications cannot be overstated, as non-compliance can lead to uncontrolled pain and unnecessary hospital readmissions [32].

### Educating Patients and Caregivers

Education plays a pivotal role in the safe transition home. Patients and their caregivers should be well-informed about:

- **Pain Management Goals:** Understanding what level of pain is acceptable and when to seek medical help [33].
- **Signs of Complications:** Identifying signs that may indicate complications, such as increased pain, fever, or unusual side effects from medications.
- **Non-Pharmacologic Pain Management Techniques:** Empowering them to use non-drug methods as needed [33].

Providing written materials that summarize key points and resources for additional support can help reinforce the information provided.

### Follow-Up Care

Ensuring a system for follow-up care is imperative. Scheduled follow-up appointments in outpatient settings allow healthcare providers to monitor the

patient's recovery and pain management. These appointments provide an opportunity to adjust pain management plans as necessary, discuss any concerns, and reinforce education on medication safety.

Telehealth services can also supplement follow-up care, allowing patients to consult their healthcare providers without the need to travel. This can be particularly beneficial for individuals managing chronic pain, where regular check-ins might be warranted [34].

### Evaluating Home Environment for Post-Surgical Safety:

Post-surgical recovery is a critical period that requires careful planning and consideration, especially regarding the home environment. The physical and emotional well-being of individuals who have undergone surgery significantly hinges on the conditions of their surroundings. Creating a safe, comfortable, and accessible home environment can enhance recovery outcomes and prevent complications. An effective home environment evaluation requires a comprehensive approach, addressing mobility, hygiene, nutrition, emotional support, and overall safety [35].

Recovery after surgery is a multifaceted process influenced by several factors, including the type of surgery, the patient's age, pre-existing health conditions, and the support available at home. Post-surgical patients often experience pain, fatigue, limited mobility, and the effects of anesthesia, all of which can hinder their ability to perform daily activities independently. Thus, an accommodating home environment becomes paramount to facilitate healing and prevent potential mishaps that could lead to further complications [35].

### Accessibility and Mobility Considerations

One of the primary factors to assess in a home environment post-surgery is its accessibility. Many surgical procedures can impair mobility, making it essential for patients to navigate their homes safely. Evaluating the layout of a home involves looking at the following key components:

1. **Entryways:** Ensure that pathways to and within the home are clear of obstacles. If stairs are an issue, consider installing ramps, stairlifts, or ensuring that living



arrangements are on the same level to facilitate easier navigation [36].

2. **Furniture Arrangement:** Rearranging furniture to provide wider pathways can help prevent falls. Consider removing low-lying furniture or decorative items that could pose tripping hazards, particularly in high-traffic areas such as hallways and living rooms.
3. **Bathroom Accessibility:** The bathroom poses unique challenges for post-surgical patients. It may be necessary to install grab bars near the toilet and in the shower, use non-slip mats, and consider the addition of a shower chair or a handheld showerhead to minimize the risk of slips and falls [36].
4. **Bedroom Setup:** Ensure that essential items, such as medications, tissues, and a phone, are readily accessible from bed. Consider a bedside commode for those who have difficulty getting to the bathroom.

By making these adjustments, the home environment can support independence and stability, enabling patients to focus on their recovery rather than navigating physical barriers [36].

### Hygiene and Infection Control

Post-surgical patients have a heightened risk of infection, making hygiene a significant concern. Evaluating the home environment for cleanliness is vital to reduce the risk of post-operative infections. Consider the following strategies:

1. **Regular Cleaning:** Ensure surfaces are cleaned frequently. Pay special attention to high-touch areas, such as doorknobs, light switches, and remote controls [37].
2. **Personal Hygiene Supplies:** Stock the home with adequate personal hygiene supplies such as hand sanitizers, antibacterial wipes, and protective coverings for surgical wounds if necessary.
3. **Waste Management:** Create a clear plan for disposing of any biomedical waste, such as dressings or medications that may be hazardous. Proper disposal methods are essential to maintaining cleanliness and preventing infection [37].

### Nutritional Needs

Nutrition plays a vital role in recovery and can significantly impact the healing process. Therefore, evaluating and optimizing the kitchen and dining areas can foster a supportive recovery environment. Key considerations include:

1. **Meal Preparation:** Post-surgery patients may have limitations on their ability to cook. Assess whether meal prep can be facilitated by family members or caregivers, or consider prepared meal services that cater to specific dietary needs [38].
2. **Accessibility to Foods:** Ensure that frequently-used items are stored at accessible heights to prevent stretching or bending, which can lead to further strain or injury.
3. **Hydration:** Maintain easy access to fluid sources, as proper hydration is crucial during recovery. Use clear containers and encourage regular fluid intake to prevent dehydration, which can slow down the healing process [38].

### Emotional Support and Environment

Recovery can also be a psychologically taxing experience. Patients may experience feelings of isolation or anxiety, particularly if they are unable to participate in their usual routines. Creating an emotionally supportive home environment involves:

1. **Encouraging Social Interaction:** Facilitate connections with friends and family through visits or virtual communication. Understanding and empathy from loved ones can vastly improve emotional well-being [39].
2. **Creating a Relaxing Space:** Establish a dedicated recovery area in the home that is quiet and comfortable, containing items that promote relaxation such as books, music, or art supplies.
3. **Encouraging Independence:** While it is crucial to provide support, encouraging small tasks can help patients feel more in control and engaged in their recovery journey [39].

### Addressing Psychosocial Factors in Recovery and Discharge:

Recovery and discharge from healthcare settings, particularly in the context of mental health and rehabilitation, is a complex process that transcends physical healing. While substantial attention has historically been focused on the biological and physiological aspects of recovery, the importance of psychosocial factors has gained recognition in both clinical practice and research [40].

#### Understanding Psychosocial Factors

Psychosocial factors encompass a broad range of influences, including psychological well-being, social relationships, environmental contexts, and cultural influences. These factors significantly affect an individual's ability to cope with illness, adhere to treatment regimens, and achieve a successful transition from hospital to home or other community settings [41].

1. **Psychological Factors:** Mental health conditions, cognitive functioning, emotional resilience, and personal coping strategies are critical components of the psychological landscape of recovery. Issues such as anxiety, depression, and low self-esteem can impede healing and complicate discharge planning [42].
2. **Social Relationships:** The support systems patients have at their disposal – including family, friends, peers, and healthcare providers – are essential. Positive relationships can enhance recovery prospects, providing emotional support, resources, and encouragement. Conversely, social isolation can exacerbate symptoms and hinder recovery.
3. **Environmental Context:** The physical environment in which a patient lives plays a crucial role in their recovery journey. Safe and supportive living conditions can facilitate healing, while unstable or unsafe environments can create additional stressors that complicate recovery [42].
4. **Cultural Influences:** Cultural beliefs and practices affect how individuals perceive illness, interact with healthcare systems, and engage in recovery. Understanding a patient's cultural background is vital to providing effective care and ensuring that

discharge plans are culturally appropriate [42].

### The Interplay Between Psychosocial Factors and Recovery Outcomes

Research has consistently shown that psychosocial factors have a profound impact on recovery outcomes. For instance, patients with strong social support networks tend to report better health outcomes, experience fewer relapses, and have improved overall psychological well-being. Studies indicate that a positive therapeutic alliance between the patient and healthcare provider correlates with enhanced adherence to treatment plans and better recovery trajectories [43].

Conversely, a lack of psychological and social support can lead to increased rates of readmission to healthcare facilities. Patients who experience social isolation, lack of family support, or have unresolved psychological issues are at higher risk of regression following discharge. The challenge, therefore, lies in identifying these factors early within the treatment process to mitigate their negative impacts on recovery [43].

#### Strategies for Addressing Psychosocial Factors

To effectively address psychosocial factors in recovery and discharge, healthcare systems must adopt a holistic approach that encompasses assessment, intervention, and follow-up.

1. **Comprehensive Assessments:** Conducting thorough assessments at the outset of treatment is crucial. This includes not only evaluating the patient's medical conditions but also understanding their psychosocial circumstances. Tools such as interviews, standardized questionnaires, and family meetings can provide valuable insights into a patient's emotional and social needs [44].
2. **Individualized Care Plans:** Discharge planning should incorporate an individualized approach that tailors the care plan to the unique psychosocial needs of each patient. This might include recommendations for community resources, such as support groups, counseling services, or peer mentoring programs, depending on the patient's circumstances [45].

3. **Involvement of Families:** Engaging family members throughout the treatment process can significantly enhance recovery outcomes. Families should be educated about the patient's condition and ways they can provide support. Family therapy sessions can also be beneficial, addressing dynamics that may contribute to the patient's challenges.
4. **Enhanced Communication:** Effective communication between healthcare providers and patients is paramount. Encouraging open dialogue allows patients to express their concerns and preferences, ensuring that their psychosocial needs are acknowledged and addressed [46].
5. **Community Integration Programs:** Facilitating smooth transitions from healthcare settings to community living can mitigate risks associated with isolation. Community integration programs that promote social interaction, vocational training, and recreational activities can improve the overall quality of life for patients, fostering a sense of belonging and purpose [47].
6. **Follow-Up Support:** Post-discharge follow-up is critical in addressing the ongoing psychosocial factors in recovery. Implementing check-ins via phone calls or telehealth appointments can help healthcare providers monitor patients' progress and offer support when patients encounter challenges [48].
7. **Multidisciplinary Approach:** Employing a multidisciplinary team that includes social workers, psychologists, and occupational therapists can foster a more comprehensive approach to recovery. Each member of the team brings unique skills and perspectives that can contribute to addressing the diverse psychosocial needs of patients [49].

#### **Follow-Up Care and Rehabilitation: Ensuring Continuity of Care:**

In the complex landscape of modern healthcare, the processes surrounding follow-up care and rehabilitation play a crucial role in ensuring the ongoing health and recovery of patients post-

treatment. This multifaceted approach extends beyond the initial stages of diagnosis and treatment, pivoting towards sustained support that is essential for fostering healing, preventing complications, and enhancing overall quality of life. The significance of follow-up care and rehabilitation cannot be overstated; they represent a commitment to continuity of care that is integral to achieving optimal patient outcomes [50].

Follow-up care is the type of medical care that occurs after the initial treatment of a disease or condition. This phase is vital for monitoring the patient's progress, managing any side effects or complications from treatments, and providing further assessments which can be critical for long-term health. Follow-up appointments allow healthcare providers to evaluate the effectiveness of the treatment plan, to adjust medications as necessary, and to initiate referrals to specialists if further intervention is warranted [51].

One of the primary objectives of follow-up care is to ensure that patients adhere to prescribed treatments and protocols. Non-compliance is a challenging barrier to effective healthcare; studies have shown that up to 50% of patients with chronic illnesses do not follow their treatment regimens as recommended. Regular follow-up visits provide an opportunity for healthcare providers to address any barriers to adherence, to educate patients about their conditions, and to reinforce the importance of compliance [52].

Moreover, follow-up care is not limited to physical health; it also encompasses mental health assessments. Patients recovering from serious illnesses or surgeries may experience psychological stress or anxiety, making the integration of mental health evaluations a critical component of follow-up care. By providing continual support and monitoring mental health, healthcare providers can ensure that patients remain resilient and engaged in their recovery process [53].

Rehabilitation refers to the therapeutic processes aimed at restoring function and improving the quality of life for individuals who have experienced illness, injury, or surgery. It encompasses a wide range of interventions depending on the specific needs of the patient. For instance, a patient recovering from a stroke may require physical therapy, occupational therapy, and speech therapy to regain lost function, while someone who has undergone orthopedic surgery may require a tailored

physical rehabilitation program to restore mobility and strength [54].

Rehabilitation is deeply intertwined with follow-up care, yet they are often viewed as separate entities within the healthcare system. However, it is crucial for rehabilitation services to be integrated into the continuum of care to ensure that patients are not left to navigate their recovery and rehabilitation independently. This requires a coordinated effort among healthcare providers, including physicians, nurses, physical therapists, occupational therapists, and mental health professionals [55].

A well-structured rehabilitation program is not just about physical recovery; it considers the holistic well-being of the patient. This includes addressing emotional and social challenges that may arise during the recovery process. For example, chronic pain management, adjustment to disability, and reintegration into social environments are essential components that rehabilitation services must address in tandem with physical recovery [56].

Continuity of care is a principle that encapsulates the idea of maintaining an ongoing therapeutic relationship with healthcare providers across different phases of treatment. It emphasizes the need for seamless transitions between various stages of care, ensuring that patients are not lost in the healthcare system and that there is a shared understanding of their history and ongoing needs [57].

With the increasing complexity of healthcare systems, continuity of care can often be compromised by fragmented services and poor communication between providers. This fragmentation can lead to gaps in treatment, inefficiency, and an increased likelihood of adverse outcomes. To combat these issues, providers must prioritize communication and collaboration. Implementing integrated electronic health records (EHR) systems can enable seamless sharing of patient information among all members of a care team, reducing redundancy and ensuring that everyone is on the same page [58].

Furthermore, patient education is a vital component of continuity of care. Patients equipped with the knowledge of their health conditions, treatments, and rehabilitation efforts are better positioned to advocate for themselves. This active participation fosters a sense of ownership and responsibility towards one's health, ultimately leading to improved

adherence to follow-up protocols and rehabilitation processes [59].

Despite the critical importance of follow-up care and rehabilitation, several challenges persist. Access to care can be hindered by various socioeconomic factors, including lack of insurance, geographic barriers, and insufficient transportation options. These disparities can lead to unequal access to necessary follow-up services and rehabilitation programs, disproportionately affecting vulnerable populations [60].

Additionally, the time constraints faced by healthcare providers can impede effective follow-up care. Busy schedules may limit the time available for patient interactions, which can diminish the quality of patient education and relationship building. As such, healthcare organizations must explore innovative solutions, such as telehealth platforms, to expand access to follow-up services and provide flexible options for patient engagement [61].

Finally, there is a growing need for research into the best practices for follow-up care and rehabilitation. By identifying effective models of care, healthcare providers can better understand how to design and implement programs that will ultimately enhance patient outcomes and satisfaction [62].

### **Conclusion:**

In conclusion, effectively preparing patients for discharge after orthopedic surgery is a multifaceted process that requires comprehensive nursing considerations. From the moment of admission, nurses play a crucial role in assessing individual patient needs, providing essential education, and facilitating a safe transition from the hospital to home. By addressing both the physical and psychosocial aspects of recovery, nurses can significantly enhance patient understanding and confidence, thereby promoting adherence to post-operative care instructions.

An individualized approach that includes thorough communication and follow-up planning is vital for minimizing complications and ensuring optimal recovery outcomes. By fostering a collaborative environment that involves family members and multidisciplinary teams, nurses can help patients navigate their rehabilitation journey successfully. Ultimately, prioritizing effective discharge planning not only improves patient satisfaction and quality of life but also contributes to the overall efficiency of

the healthcare system. As patient education and support continue to evolve, ongoing training and resources for nursing staff will remain essential in adapting to the dynamic needs of orthopedic surgical patients.

## References:

1. Woolhead GM, Donovan JL, Dieppe PA. Outcomes of total knee replacement: a qualitative study. *Rheumatology (Oxford)* 2005;44(8):1032–7. doi: 10.1093/rheumatology/keh674.
2. Andrew NE, Busingye D, Lannin NA, Kilkenny MF, Cadilhac DA. The Quality of Discharge Care Planning in Acute Stroke Care: Influencing Factors and Association with Postdischarge Outcomes. *J Stroke Cerebrovasc Dis.* 2018;27(3):583–90. doi: 10.1016/j.jstrokecerebrovasdis.2017.09.043.
3. Krejcie RV, Morgan DW. Determining Sample Size for Research Activities. *Educ Psychol Meas.* 1970;30:607–10. doi: 10.1177/001316447003000308.
4. Brooke BS, Goodney PP, Powell RJ, Fillinger MF, Travis LL, Goodman DC et al. Early discharge does not increase readmission or mortality after high-risk vascular surgery. *J Vasc Surg.* 2013;57(3):734–40. doi: 10.1016/j.jvs.2012.07.055.
5. Cleary PD, Edgman-Levitan S, Roberts M, Moloney TW, McMullen W, Walker JD et al. Patients evaluate their hospital care: a national survey. *Health Aff (Millwood).* 1991;10(4):254–67. doi: 10.1377/hlthaff.10.4.254.
6. Tamburini M, Gangeri L, Brunelli C, Beltrami E, Boeri P, Borreani C et al. Assessment of hospitalized cancer patients' needs by the Needs Evaluation Questionnaire. *Ann Oncol.* 2000;11(1):31–7. doi: 10.1023/a:1008396930832.
7. Simons L, Petch A. Needs assessment and discharge: a Scottish perspective. *J Psychiatr Ment Health Nurs.* 2002;9(4):435–45. doi: 10.1046/j.1365-2850.2002.00506.x.
8. Shepperd S, McClaran J, Phillips CO, Lannin NA, Clemson LM, McCluskey A et al. Discharge planning from hospital to home. *Cochrane Database Syst Rev.* 2010;(1):CD000313. doi: 10.1002/14651858.CD000313.pub3.
9. Huang TT, Liang SH. A randomized clinical trial of the effectiveness of a discharge planning intervention in hospitalized elders with hip fracture due to falling. *J Clin Nurs.* 2005;14(10):1193–201. doi: 10.1111/j.1365-2702.2005.01260.x.
10. Richard A, Medina J, Brown V, Sitzia J. Patients' needs assessment in cancer care: a review of assessment tools. *Support Care Cancer.* 2007;15(10):1125–44. doi: 10.1007/s00520-006-0205-8.
11. Choo J, Cheah J. Clinical pathways: a direction forward in health care. *Aust Heal Rev.* 2000;23(2):77–87. doi: 10.1071/ah000077a.
12. Yam CH, Wong EL, Cheung AW, Chan FW, Wong FY, Yeoh EK. Framework and components for effective discharge planning system: a Delphi methodology. *BMC Health Serv Res.* 2012;12:396. doi: 10.1186/1472-6963-12-396.
13. Toufighi H, Sharifi V, Alaghband Rad J, Shadloo B. Development and Implementation of Discharge Planning Service in Roozbeh Hospital. *Iran J Psychiatry Clin Psychol.* 2018;24(1):56–69. doi: 10.29252/nirp.ijpcp.24.1.56.
14. Boyatzis RE. An overview of intentional change from a complexity perspective. *J Manag Dev.* 2006;25(7):607–23. doi: 10.1108/02621710610678445.
15. Saldana J. *The Coding Manual for Qualitative Researchers.* SAGE Publications; 2009. p. 223.
16. Ludin SM, Arbon P, Parker S. Patients' transition in the intensive care units: concept analysis. *Intensive Crit Care Nurs.* 2013;29(4):187–92. doi: 10.1016/j.iccn.2013.02.001.
17. Boyce MS. Scale for resource selection functions. *Divers.* 2006;12(3):269–76. doi: 10.1111/j.1366-9516.2006.00243.x.
18. Stevens A, Gillam S. Health needs assessment: Needs assessment: from theory to practice. *BMJ.* 1998;316(7142):1448–52. doi: 10.1136/bmj.316.7142.1448.
19. Lo S, Stuenkel DL, Rodriguez L. The impact of diagnosis-specific discharge instructions on patient satisfaction. *J*

- Perianesth Nurs. 2009;24(3):156–62. doi: 10.1016/j.jopan.2009.03.004.
20. Richardson A, Medina J, Brown V, Sitzia J. Patients' needs assessment in cancer care: a review of assessment tools. *Support Care Cancer*. 2007;15(10):1125–44. doi: 10.1007/s00520-006-0205-8.
21. Healy WL, Ayers ME, Iorio R, Patch DA, Appleby D, Pfeifer BA. Impact of a clinical pathway and implant standardization on total hip arthroplasty: a clinical and economic study of short-term patient outcome. *J Arthroplasty*. 1998;13(3):266–276. doi: 10.1016/S0883-5403(98)90171-1.
22. Kearney M, Jennrich MK, Lyons S, Robinson R, Berger B. Effects of preoperative education on patient outcomes after joint replacement surgery. *Orthop Nurs*. 2011;30(6):391–396. doi: 10.1097/NOR.0b013e31823710ea.
23. Padilla JA, Feng JE, Anoushiravani AA, Hozack WJ, Schwarzkopf R, Macaulay WB. Modifying patient expectations can enhance total hip arthroplasty postoperative satisfaction. *J Arthroplasty*. 2019;34(7S):S209–S214. doi: 10.1016/j.arth.2018.12.038.
24. Olthof M, Stevens M, Bulstra SK, van den Akker-Scheek I. The association between comorbidity and length of hospital stay and costs in total hip arthroplasty patients: a systematic review. *J Arthroplasty*. 2014;29(5):1009–1014. doi: 10.1016/j.arth.2013.10.008.
25. Cizmic Z, Novikov D, Feng J, Iorio R, Meftah M. Alternative payment models in total joint arthroplasty under the Affordable Care Act. *JBJS Rev*. 2019;7(3):e4. doi: 10.2106/JBJS.RVW.18.00061.
26. Jones S, Alnaib M, Kokkinakis M, Wilkinson M, St Clair Gibson A, Kader D. Pre-operative patient education reduces length of stay after knee joint arthroplasty. *Ann R Coll Surg Engl*. 2011;93(1):71–75. doi: 10.1308/003588410X12771863936765.
27. Iorio R, Clair AJ, Inneh IA, Slover JD, Bosco JA, Zuckerman JD. Early results of medicare's bundled payment initiative for a 90-day total joint arthroplasty episode of care. *J Arthroplasty*. 2016;31(2):343–350. doi: 10.1016/j.arth.2015.09.004.
28. Siddiqi A, White PB, Mistry JB, Gwam CU, Nace J, Mont MA, et al. Effect of bundled payments and health care reform as alternative payment models in total joint arthroplasty: a clinical review. *J Arthroplasty*. 2017;32(8):2590–2597. doi: 10.1016/j.arth.2017.03.027.
29. Cram P, Lu X, Kates SL, Singh JA, Li Y, Wolf BR. Total knee arthroplasty volume, utilization, and outcomes among medicare beneficiaries, 1991–2010. *JAMA*. 2012;308(12):1227–1236. doi: 10.1001/2012.jama.11153.
30. Feng JE, Novikov D, Anoushiravani AA, Schwarzkopf R. Total knee arthroplasty: improving outcomes with a multidisciplinary approach.
31. Moulton LS, Evans PA, Starks I, Smith T. Pre-operative education prior to elective hip arthroplasty surgery improves postoperative outcome. *Int Orthop*. 2015;39(8):1483–1486. doi: 10.1007/s00264-015-2754-2.
32. Molloy IB, Martin BI, Moschetti WE, Jevsevar DS. Effects of the length of stay on the cost of total knee and total hip arthroplasty from 2002 to 2013. *J Bone Jt Surg*. 2017;99(5):402–407. doi: 10.2106/JBJS.16.00019.
33. Anoushiravani AA, Nunley RM. Gainsharing strategies, physician champions, getting physician buy in. *J Arthroplasty*. 2017;32(6):1723–1727. doi: 10.1016/j.arth.2017.02.011.
34. Dundon JM, Bosco J, Slover J, Yu S, Sayeed Y, Iorio R. Improvement in total joint replacement quality metrics: year one versus year three of the bundled payments for care improvement initiative. *J Bone Jt Surg Am*. 2016;98(23):1949–1953. doi: 10.2106/JBJS.16.00523.
35. Zikmund-Fisher BJ, Couper MP, Singer E, Levin CA, Fowler FJ, Ziniel S, et al. The DECISIONS study: a nationwide survey of United States adults regarding 9 common medical decisions. *Med Decis Making*. 2010;30:20–34. doi: 10.1177/0272989X09353792.
36. Ayyadhah Alanazi, A. (2014). Reducing anxiety in preoperative patients: A systematic review. *The British Journal of Nursing*, 23(7), 387–393. doi: 10.12968/bjon.2014.23.7.387.
37. Buus, A., Hejlsen, O. K., Dorisdatter Bjørnes, C., & Laugesen, B. (2021). Experiences of pre- and postoperative information among patients undergoing knee arthroplasty: A systematic review and narrative synthesis. *Disability and*

- Rehabilitation, 43(2), 150–162. 10.1080/09638288.2019.1615997.
38. Allvin, R., Berg, K., Idvall, E., & Nilsson, U. (2007). Postoperative recovery: A concept analysis. *Journal of Advanced Nursing*, 57(5), 552–558. 10.1111/j.1365-2648.2006.04156.x.
39. Kang, E., Gillespie, B. M., Tobiano, G., & Chaboyer, W. (2018). Discharge education delivered to general surgical patients in their management of recovery post discharge: A systematic mixed studies review. *International Journal of Nursing Studies*, 87, 1–13. 10.1016/j.ijnurstu.2018.07.004.
40. Berg, K., Årestedt, K., & Kjellgren, K. (2013). Postoperative recovery from the perspective of day surgery patients: A phenomenographic study. *International Journal of Nursing Studies*, 50(12), 1630–1638. 10.1016/j.ijnurstu.2013.05.002.
41. De Oliveira, G. S., Jr., McCarthy, R. J., Wolf, M. S., & Holl, J. (2015). The impact of health literacy in the care of surgical patients: A qualitative systematic review. *BMC Surgery*, 15, 86. 10.1186/s12893-015-0073-6.
42. Andersson, V., Otterstrom-Rydberg, E., & Karlsson, A. K. (2015). The importance of written and verbal information on pain treatment for patients undergoing surgical interventions. *Pain Management Nursing*, 16(5), 634–641. 10.1016/j.pmn.2014.12.003.
43. Ingadóttir, B., Blondal, K., Jaarsma, T., & Thylen, I. (2016). Perceptions about traditional and novel methods to learn about postoperative pain management: A qualitative study. *Journal of Advanced Nursing*, 72(11), 2672–2683. 10.1111/jan.13021.
44. Ingadóttir, B., Thylén, I., & Jaarsma, T. (2015). Knowledge expectations, self-care, and health complaints of heart failure patients scheduled for cardiac resynchronization therapy implantation. *Patient Preference and Adherence*, 9, 913–921. 10.2147/ppa.S83069.
45. Clari, M., Frigerio, S., Ricceri, F., Pici, A., Alvaro, R., & Dimonte, V. (2015). Follow-up telephone calls to patients discharged after undergoing orthopaedic surgery: Double-blind, randomised controlled trial of efficacy. *Journal of Clinical Nursing*, 24(19–20), 2736–2744. 10.1111/jocn.12795.
46. Ingadóttir, B., & Zoëga, S. (2017). Role of patient education in postoperative pain management. *Nursing Standard*, 32(2), 50–63. 10.7748/ns.2017.e10939.
47. Fredericks, S., & Yau, T. (2013). Educational intervention reduces complications and rehospitalizations after heart surgery. *Western Journal of Nursing Research*, 35(10), 1251–1265. 10.1177/0193945913490081.
48. Huang, T. T., Sung, C. C., Wang, W. S., & Wang, B. H. (2017). The effects of the empowerment education program in older adults with total hip replacement surgery. *Journal of Advanced Nursing*, 73(8), 1848–1861. 10.1111/jan.13267.
49. Fredericks, S., & Yau, T. (2017). Clinical effectiveness of individual patient education in heart surgery patients: A systematic review and meta-analysis. *International Journal of Nursing Studies*, 65, 44–53. 10.1016/j.ijnurstu.2016.11.001.
50. Blöndal, K., & Sveinsdóttir, H. (2011). Fræðsla skurðsjúklinga: Inntak, ánægja og áhrifaþættir. *Tímarit hjúkrunarfræðinga*, 87(1), 49–60.
51. Friedman, A. J., Cosby, R., Boyko, S., Hatton-Bauer, J., & Turnbull, G. (2011). Effective teaching strategies and methods of delivery for patient education: A systematic review and practice guideline recommendations. *Journal of Cancer Education*, 26(1), 12–21. 10.1007/s13187-010-0183-x.
52. Jonker, L. T., Haveman, M. E., de Bock, G. H., van Leeuwen, B. L., & Lahr, M. M. H. (2020). Feasibility of perioperative ehealth interventions for older surgical patients: A systematic review. *Journal of the American Medical Directors Association*, 21(12), 1844–1851.e1842. 10.1016/j.jamda.2020.05.035.
53. Health Care Education Association, H. (2021). Patient Education Practice Guidelines for Health Care Professionals.
54. Morris BJ, Haigler RE, Laughlin MS, Elkousy HA, Gartsman GM, Edwards TB. Workers' compensation claims and outcomes after reverse shoulder arthroplasty. *J Shoulder Elbow Surg*. 2015;24(3):453–459. doi: 10.1016/j.jse.2014.07.009.
55. McDonald S, Page MJ, Beringer K, Wasiak J, Sprowson A. Preoperative education for hip or knee replacement. In: McDonald S, editor. *Cochrane database of systematic reviews*. Chichester: Wiley; 2014.

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56. Halawi MJ, Vovos TJ, Green CL, Wellman SS, Attarian DE, Bolognesi MP. Patient expectation is the most important predictor of discharge destination after primary total joint arthroplasty. *J Arthroplasty*. 2015;30(4):539–542. doi: 10.1016/j.arth.2014.10.031.
57. Husted H, Holm G, Jacobsen S. Predictors of length of stay and patient satisfaction after hip and knee replacement surgery: fast-track experience in 712 patients. *Acta Orthop*. 2008;79:168–173. doi: 10.1080/17453670710014941.
58. Edusei E, Grossman K, Payne A, Perez B, Inneh I, Nelson C, et al. Impact of social support and pain coping ability on length of stay and discharge disposition following hip and knee arthroplasty: a prospective study. *Bull Hosp Jt Dis*. 2017;75(2):137–139.
59. Cheung A, Fu H, Cheung MH, Chan WKV, Chan PK, Yan CH, et al. How well do elderly patients do after total knee arthroplasty in the era of fast-track surgery? *Arthroplasty*. 2020;2(1):1–6. doi: 10.1186/s42836-020-00037-5.
60. Tufescu TV, Buckley R. Age, gender, work capability, and worker's compensation in patients with displaced intraarticular calcaneal fractures. *J Orthop Trauma*. 2001;15(4):275–279. doi: 10.1097/00005131-200105000-00007.
61. Møller AM, Villebro N, Pedersen T, Tønnesen H. Effect of preoperative smoking intervention on postoperative complications: a randomised clinical trial. *Lancet*. 2002;359(9301):114–117. doi: 10.1016/S0140-6736(02)07369-5.
62. Halawi MJ, Stone AD, Gronbeck C, Savoy L, Cote MP. Medicare coverage is an independent predictor of prolonged hospitalization after primary total joint arthroplasty. *Arthroplasty Today*. 2019;5(4):489. doi: 10.1016/j.artd.2019.07.001.