

# OVERCOMING CHALLENGES IN ORTHOPEDIC CARE

THROUGH EDUCATION AND STANDARDIZATION

---





# INTRODUCTION

---

As the patient population ages, the number of orthopedic surgeries in the United States is likely to increase. Joint Commission orthopedic certifications allow organizations to elevate the level of care that they provide using evidence-based, data-driven metrics. Applying these standards uniformly and consistently effectively addresses some of the biggest challenges in orthopedic care, and leads to measurably improved outcomes, streamlined processes and greater patient safety.

# CHALLENGES IN ORTHOPEDIC CARE

---

## Standardization

One of the most basic challenges in orthopedic care is a lack of standardization in equipment, procedures and protocols.

Historically, surgeons have simply followed their own preferences when it comes to surgical techniques and equipment. Unfortunately, research has shown that lack of standardization increases the patient's risk of developing complications and adverse treatment outcomes.

That is why The Joint Commission recommends that healthcare providers standardize their methods and tools. Preoperative, intraoperative, postoperative and post-discharge phases can all be improved through standardization.

### Why are clinical practical guidelines important?

Clinical practical guidelines are systematically developed standards that help both practitioners and patients make decisions about appropriate health care. These standards are developed based on the best available evidence and science. Data shows that using clinical practical guidelines can reduce unwarranted practice variations and improve healthcare quality and safety.



# STANDARDIZATION

---

## Getting Started

The Joint Commission recommends that organizations follow these steps to move toward standardization thoughtfully and collaboratively.



## Assemble a team.

The first step on the road to standardization is to put together a team of healthcare providers to study and review clinical practical guidelines. Team members should be intimately familiar with the relevant surgical procedures, technologies and protocols.

## Review clinical practical guidelines.

Using relevant literature, determine the key objectives and standards for the specific condition you are treating.

## Compare current practices.

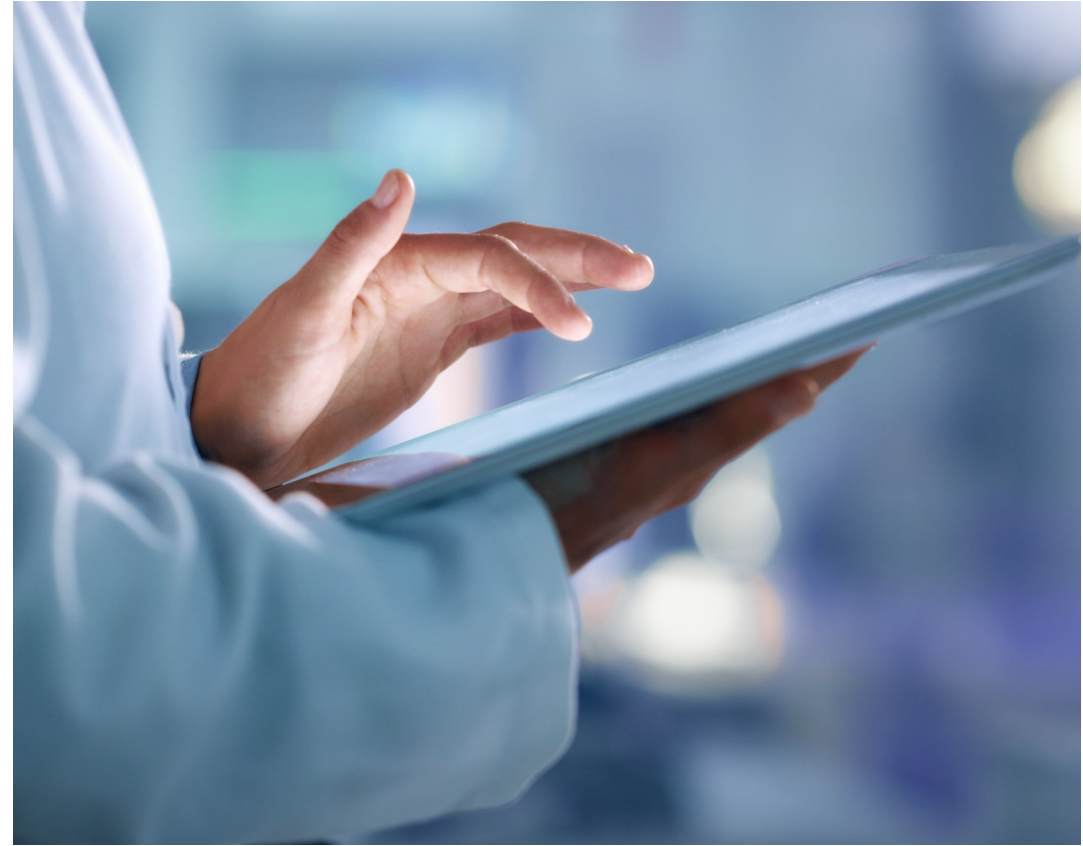
Outline the organization's current preoperative, intraoperative and postoperative standards. Consider how these practices impact the care that surgeons and staff provide.

## Update guidelines.

Using the information gleaned from clinical practical guidelines, establish updated preoperative, intraoperative and postoperative standard protocols and pathways.

## Personalize care.

The final step is to then personalize standardized care plans, as needed, based on the patient's condition and comorbidities.



Comprehensive, robust standardization in preoperative, intraoperative, postoperative and post-discharge phases enables organizations to provide patients with the most consistent, efficient and effective care possible.



# PATIENT OPTIMIZATION

---

## Recommendations for Providers of Preoperative Consultations

“Pre-op clearance” is an older term that was used for many years to refer to the preoperative consultations and assessments that patients completed prior to surgery. Traditionally, a surgeon would send a patient to their primary care physician for assessment. After the physician examined the patient, they would then send a note back to the surgeon confirming that the patient was cleared for surgery.

Today, healthcare providers complete preoperative assessments that are about much more than simply achieving pre-op clearance. These consultations are more comprehensive in nature; the purpose is to evaluate, and, if necessary, implement measures to prepare higher-risk patients for surgery.

To effectively provide this consultative service, the provider should understand the risk associated with the particular type of surgery that is planned, and relate this risk to the patient’s underlying, acute and chronic medical problems. The complete consultation should include recommendations for evaluation and treatment, including prophylactic therapies to minimize preoperative risk.

Ideally, the patient should be assessed **several weeks before surgery**. This timeframe is necessary in case the patient requires interventions to ensure that they are totally optimized for surgery.



## TRUE PATIENT OPTIMIZATION CAN HELP TO:



Avoid  
hospitalizations



Minimize postponed and  
canceled surgeries



Improve  
patient outcomes



Limit the patient's risk  
of postoperative infections



# PATIENT OPTIMIZATION


---

## Pre-Surgery Interventions for Orthopedic Surgery Candidates

In order to optimize surgery candidates, providers should screen patients for two types of risk factors: non-modifiable and modifiable.








**Modifiable risk factors** are concerns that, with timely intervention, can be addressed or minimized prior to surgery. Modifiable risk factors include:

- BMI greater than 40 (may warrant referral to a bariatric program or nutritionist)
- Diabetes diagnosis (especially with an A1C over seven)
- Low vitamin D levels
- History of deep vein thrombosis (DVT)
- History of pulmonary embolism (PE)
- History of methicillin-resistant Staphylococcus aureus (MRSA)
- Tobacco use (may warrant referral to a smoking cessation program)
- Sleep apnea diagnosis (may warrant referral for a sleep study)
- Oral health issues (may warrant referral to a dentist)



**Non-modifiable risk factors** are physical realities and comorbidities that cannot be altered, and must be taken into consideration. Common non-modifiable risk factors include:

- Metal sensitivities and metal allergies
- Previous history of orthopedic surgery, with or without complications
- Progressive neurologic disease diagnosis
- Inflammatory arthritis diagnosis



### Who leads patient optimization?

Optimization is often led by orthopedic advanced practice providers or anesthesiologists. These are people who are very familiar with the underlying risks of the associated orthopedic surgeries, as well as the ways in which a patient's acute or chronic comorbidities can impact the patient's outcome.



# PATIENT EDUCATION

---

## Outpatient Procedures: Challenges and Considerations

Increasingly, orthopedic surgeries are becoming outpatient, rather than inpatient procedures. The need to educate patients is greater than ever, since many of these patients will spend little to no time in an inpatient setting after surgery.

When considering patient education related to orthopedic procedures, the goal is to prepare the patient and their family members to provide adequate health care after the surgery. This may encompass:

- Discussing strategies to manage pain and swelling
- Talking about ways to manage nausea and vomiting
- Reviewing how to assess the health of a wound and teaching the patient how to change wound dressing
- Outlining ways to prevent infection, such as proper hand washing
- Providing instruction on how to take medications and reviewing medication side effects
- Sharing common symptoms of DVT and PE and offering strategies to minimize risk
- Explaining comorbidities that may affect the healing process
- Discussing potential changes to bowel and bladder function
- Ensuring the patient has access to necessary equipment like walkers, canes and braces, and providing instruction on how to use it
- Talking about how to safely get in and out of a car
- Discussing reasonable expectations for healing timelines and mobility
- Emphasizing the importance of hydration and good nutrition
- Reviewing situations in which the patient should call their doctor
- Making a plan for home health, occupational therapy and physical therapy
- Outlining the patient's schedule of follow-up appointments

# PATIENT EDUCATION

---

## Key Considerations

As previously mentioned, it is vitally important that patients are assessed and optimized prior to the day of surgery. Research has shown that implementing patient education early in the treatment process is effective at reducing adverse outcomes.

Additionally, it's important to consider how your education efforts:

- Appeal to visual, auditory and kinesthetic learners.
- Are accessible to patients with varying degrees of literacy.
- Are reviewable at home.
- Facilitate and encourage patient questions.

The final objective is to assess how well patients understand the educational materials they've received. Take the time to review important information at multiple points throughout the preoperative and postoperative process and encourage patients to ask questions as they come up.

By supporting standardization of patient care, and by emphasizing patient optimization, we can overcome some of the biggest challenges in orthopedic care. The goal is to anticipate the patient's needs and educate them accordingly, so that we can achieve the desired treatment outcomes.

Learn more about improving quality of care with  
**Joint Commission Orthopedic Certifications.**  
Visit [jointcommission.org](https://www.jointcommission.org) for more information.

