## **Complications**

While uncommon, complications can occur during and after surgery. Complications include, but are not limited to, infection, implant breakage, nerve damage, and fracture. Any of these complications may require additional surgery.

Although implant surgery is extremely successful in most cases, some patients still experience pain. No implant will last forever, and the patient's post-surgical activities can affect the longevity of the implant. Be sure to discuss these and other risks with your surgeon.

To minimize the potential for complications, your surgeon may recommend a visit with your primary care physician prior to surgery to complete tests. You may also need to have your dental work up to date and may be shown how to prepare your home for your recovery.

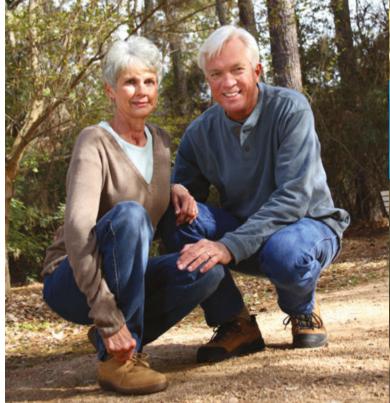
## **After Surgery**

After surgery, patients typically spend one to two nights in the hospital. The arm may be in a sling for a period of time, and the length of recovery time will vary with each person. Physical therapy after surgery is individualized to each patient and is typically guided by the orthopaedic surgeon.

While the goals of reverse shoulder replacement are to reduce pain and restore motion, it is important to strictly follow your surgeon's advice regarding activity after surgery. Even though you may have reduced pain and improved function, always remember to limit your activities to those cleared by your orthopaedic surgeon. If you have specific questions regarding activities after surgery, please speak with your surgeon.

## Closing

The Comprehensive Reverse Shoulder from Zimmer Biomet is one option available for the treatment of massive rotator cuff tears. If you have additional questions, please consult your orthopaedic surgeon.



To learn more about Zimmer Biomet joint replacements, obtain helpful information for patients and caregivers, or for assistance in finding a surgeon familiar with our products and surgical techniques,

call toll-free: 800-447-5633 or visit zimmerbiomet.com

Important Note: This brochure is intended to provide an overview of shoulder replacement surgery and should be reviewed with your doctor. It does not include all of the information needed to determine eligibility for shoulder replacement or for the proper use and care of artificial shoulder replacements. Please consult your surgeon for more information. Information may also be obtained by calling the toll-free number or visiting the web site. The toll-free number also can be used to obtain complete product contraindications, warnings, precautions, and possible adverse effects. Individual results may vary. Your results will depend on your personal circumstances. How long a shoulder replacement will last varies from patient to patient. It depends on many factors, such as the patient's physical condition, activity level, and body weight and the surgical technique. Replacement joints are not as strong or durable as a natural, healthy joint, and there is no guarantee that an artificial joint will last the rest of a patient's life. All shoulder replacements may need to be replaced at some point.

This device is available only on the order of a physician







## Your Guide to Understanding Comprehensive Reverse Shoulder Replacement

This brochure will help you understand basic shoulder anatomy, reasons for reverse shoulder replacement surgery, the Comprehensive Reverse Shoulder System from Zimmer Biomet, the surgical procedure, and what to expect after surgery. This brochure is for educational purposes only and is not intended to replace the expert guidance of your orthopaedic surgeon.

Any questions or concerns you may have should be directed to your orthopaedic surgeon.

## **The Healthy Shoulder**

The shoulder joint consists of the head of the humerus (upper arm bone) and the scapula (shoulder blade). The head of the humerus moves against the scapula in a shallow socket called the glenoid, much like a golf ball on a tee. The glenoid's smaller size allows the wide range of motion in a healthy shoulder.

The surfaces of the humerus and glenoid are covered with lubricating tissue called cartilage, which provides the shoulder joint frictionless, pain-free movement. The combination of the muscles and tendons in the shoulder is called the rotator cuff. The rotator cuff is located under part of the scapula and provides stability to the joint during a variety of arm movements.



#### **Rotator Cuff Tear**

If you are a potential candidate for reverse shoulder replacement, you may be suffering from pain as a result of a previous rotator cuff tear. A cuff tear causes your shoulder joint to lose much of its natural support, leading to increased instability. Often, this results in the normal shoulder becoming destabilized, and moving out of socket completely. Over time, this instability leads to bone-on-bone contact, moderate to severe pain, and extremely limited mobility.



# Comprehensive Reverse Shoulder Replacement

The word "replacement" makes one think that surgeons remove the entire shoulder. In truth, surgeons only replace the damaged bone and cartilage at the ends of the bones in the joint.

Reverse shoulder replacement has revolutionized the treatment of massive rotator cuff tears. The unique procedure reverses the anatomy of the shoulder. It is designed so that the ball is attached to the shoulder blade (scapula) and the socket is placed on top of the upper-arm bone (humerus). By reversing the normal anatomy, the deltoid muscle, one of the stronger shoulder muscles and the only abducting muscle remaining in the shoulder, is given control to raise the arm.

The Comprehensive Reverse Shoulder implant from Zimmer Biomet offers surgeons many options for restoring function and reducing pain. The shoulder system is the next generation reverse shoulder prosthesis, offering unmatched surgical flexibility for orthopaedic surgeons.

Most candidates for reverse shoulder replacement are in extreme pain, have almost no shoulder mobility, and have tried various treatment options, often including primary shoulder replacement. Reverse shoulder replacement is intended to alleviate pain and improve mobility to the point of being able to perform activities of daily living (ADLs).

The goals of reverse shoulder replacement include:

- · Pain relief
- Improved function

