

# Choosing Wisely<sup>®</sup>

*An initiative of the ABIM Foundation*



## Blood transfusions for anemia in the hospital

### How much blood do you need?

**G**etting a blood transfusion in the hospital can save your life. You may need a lot of blood if you are bleeding heavily because of an injury or illness.

But anemia is usually not urgent. And usually you don't need a lot of blood. You may only need one unit of blood while you are in the hospital. Or you may not need any blood at all. Here's why:

#### What is anemia?

If you have anemia, your blood doesn't have enough red blood cells, or they don't work properly. Red blood cells carry hemoglobin. This is an iron-rich protein that helps bring oxygen to the body. Anemia is measured in hemoglobin levels.

There are a number of reasons you may become anemic while you are in the hospital, including:

- Bleeding
- Frequent blood draws



- Liver and kidney damage
- A chronic condition or disease
- Medications
- Kidney disease
- Chronic infections
- Cancer

### **Extra blood units are not helpful.**

A normal hemoglobin level is 11 to 18 grams per deciliter (g/dL), depending on your age and gender. But 7 to 8 g/dL is a safe level. Your doctor should use just enough blood to get to this level. Often, one unit of blood is enough.

Some doctors believe that hospital patients who fall below 10 g/dL should get a blood transfusion. But recent research found that:

- Many patients with levels between 7 and 10 g/dL may not need a blood transfusion.
- One unit of blood is usually as good as two, and it may even be safer.
- Some patients in intensive care may do better when they receive less blood.

### **Using more blood units may increase risks.**

In the U.S., the blood is generally very safe. Serious risks when you receive blood are very rare, but can include:

- Cardiac overload—severe shortness of breath from overloading the heart with fluid
- Lung injury
- Infections

These problems can happen with any transfusion. But the risks are higher if you get more blood.

### **Blood transfusions can cost a lot.**

A unit of blood usually costs about \$200 to \$300. There are added costs for storage and processing, as well as hospital and equipment fees. Costs can be much higher if the transfusion causes an infection or serious problem. Also, if you only use the blood you need, you are helping to keep a blood supply available for other people.

### **Do patients ever need more than one unit?**

Most patients do well with just one unit of blood, if the transfusion is not for an emergency. But some people may need more blood. Discuss this with your doctor.

You may need more than one unit if:

- You have bleeding that is not well controlled, such as bleeding that continues during surgery.
- You have severe anemia and unstable chest pain. (“Unstable” means that your symptoms keep changing.)

This report is for you to use when talking with your healthcare provider. It is not a substitute for medical advice and treatment. Use of this report is at your own risk.

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