Reading: Medical Equipment

When hearing the term 'medical equipment', a typical layman, whose only knowledge about health care comes from an annual check-up at a local surgery and TV shows such as 'House, M.D.' or 'ER', might think of complex devices like a defibrillator, the star of the show in every scene in which somebody's life is saved.

However, medical equipment might refer to both very complex devices used by professionals as well as to simple instruments which you might even use yourself. Let's see what equipment is used when you catch influenza.

Imagine you wake up in the morning with a terrible headache, feeling feverish. You quickly phone the boss and say you need a day off, then grab a thermometer to take the temperature. Gosh, it's 102 degrees Fahrenheit! You really need to go to the doctor's. After you arrive at your local clinic and wait some time in a queue, the GP asks you in. She asks what is wrong and then puts a tongue depressor in your mouth to see your throat. Then she asks you to take off your sweater and uses a stethoscope to listen to your chest. Finally she tells you that you have caught the flu, prescribes you some medicine and says you must stay at home for a couple of days.

As you can see, several pieces of equipment are used even in such a common procedure like diagnosing flu, some of which you may even have at home. What about other examples? Let's see what equipment might be used in case of a broken bone.

It's mid February and you are skiing in the Rockies. You are having an amazing time but you fall and feel terrible pain in both your shin and your arm. You have probably broken your arm and your leg! It's so painful you can't move so you call out mountain rescue. They come by chopper, put you on a stretcher, use a splint to immobilize your limbs and take you to the hospital. You are told you have broken your leg and it's put in a cast. If you're lucky and your arm is not broken, it's only wrapped in bandage and you have to wear a sling. As a result, walking on crutches is out of the question, so you leave the hospital in a wheelchair. But how do the doctors make sure your limb is broken or not? Well, you have an X-ray taken.

What other gear is used in hospitals? Let's study a case of a person brought to an A&E department with a head injury. The person is brought by paramedics, who have already put a brace on his or her neck in order to prevent further injury. Firstly, diagnostic equipment is put to use in order to check the person's condition.

An MRI scan is taken to check for bleeding and swelling in the brain. If immediate surgery is required, the patient is administered an anesthetic by means of a syringe. Then a surgeon uses a scalpel to cut into his or her body and forceps to manipulate the tissues. After the surgery is performed, a catheter is inserted for the time when he or she is immobilized.

Various types of medical equipment, ranging from basic tools to highly advanced cutting
edge devices, are used in very different situations. One thing is certain - each piece has been developed to help us recover or even save our lives. And we might need them at the very beginning of our lives - as is the case with an incubator, which is used in neonatal units to help or treat prematurely born children.

**Discussion Questions**

Which three pieces of medical equipment do you think every hospital should have?

What equipment do you use on a regular basis?

What was the most revolutionary piece of medical equipment of the twentieth century? Why do you think so?