

Bronson's Robot Assisted Doctor (BRAD)

Frequently Asked Questions

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What is regional telemedicine?

Regional telemedicine is a service that provides regional facilities with access to specialists for consult and patient evaluation through the use of a robot. The robot, Bronson's Robot Assisted Doctor or BRAD, allows regional emergency department (ED) physicians to access neurological specialists who can – in real time – visually and verbally assess the patient as well as talk with the patient, family and physician. Regional telemedicine helps communities gain access to specialists not otherwise available locally.

Why is it important to hospitals?

It's important because it's the right thing to do for the patient. Providing immediate assistance from neurological specialists for a patient with stroke symptoms ensures the patient receives the best possible treatment.

What is BRAD?

BRAD is a wireless, mobile, remote presence robot that allows emergency department (ED) physicians at Three Rivers Health (TRH) immediate access to a Bronson neurological specialist.

How does BRAD work?

The robot is located in the TRH ED. When a patient presents with symptoms of stroke, the TRH ED physician calls Bronson First at 1-800-BRONSON to request a neurologist for stroke evaluation. The neurologist activates and remotely "drives" the robot to the patient's bedside in the TRH ED. Using this technology, the patient can see and interact with the neurologist as he/she visually assesses the patient. The neurologist can evaluate pupillary responses and X-rays, and, with the help of a nurse, listen to the patient's heartbeat using a stethoscope. Through BRAD, the neurologist and the ED physician can work together to determine the best course of treatment as if they were both physically present at the patient's bedside.

What are the benefits to using BRAD?

Consulting via telemedicine with specialists at Bronson benefits the stroke patient by allowing him/her to be diagnosed and treated more rapidly. Studies show that stroke patients have the best possible chance of survival if they receive proper treatment within three hours of the onset of stroke symptoms. There is also much less risk to the patient because a physical transfer to another facility is not necessary.

What types of specialists are available through BRAD?

| BRAD provides access to neurologists including a vascular neurologist.

Can BRAD be used for all ED patients?

No. Presently BRAD is intended to be used only with patients who have symptoms of stroke. BRAD enables the ED physician to acquire a remote consult by a neurologist and the Stroke Call Down team at Bronson.

Does Bronson have any special stroke qualifications?

Yes, Bronson has many special qualifications for treating patients with symptoms of stroke, including:

- Bronson is a Primary Stroke Center certified by The Joint Commission.
- Bronson's Rapid Response Team is trained to quickly assess the severity of a stroke. The team is made up of specialized ER physicians, neurologists, neurosurgeons and nurses with extensive knowledge and experience in treating stroke patients and uses protocols developed by the National Institutes of Health.
- Stroke team available 24-hours a day, every day, includes nationally recognized protocols for administering the FDA-approved drug t-PA. This drug can reduce stroke damage if it is given within three hours after the onset of stroke symptoms.
- A neurointerventional surgeon at Bronson is available 24 hours a day to evaluate the extent of brain injury after a stroke. They use the latest MRI, MRA, and CT scanning technology and perform interventions including coiling and intra-arterial t-PA.
- Bronson employs Dean D. Kindler, MD, MA, southwest Michigan's only board-certified vascular neurologist and Hisanori Hasegawa, MD, the area's only epileptologist.
- Bronson has advanced capabilities in stroke including neuroendovascular therapies such as intra-arterial thrombolytics and clot retrieval. We also offer personalized outpatient rehabilitation services to support recovery. Bronson has a dedicated Neurovascular Unit (NVU) and a Neuro Critical Care Unit that serves as a single destination for adult patients admitted for neurovascular issues such as stroke, traumatic brain injury, CNS tumors, aneurysms, seizures and related neurovascular disorders.

Is BRAD easy to use? How long does it take to learn how to use it?

| Yes, BRAD is very easy to use. Users are fully trained and proficient after only two thirty-minute training sessions.

How can I access BRAD?

An ED physician can simply call Bronson First at 1-800-BRONSON to request a consult with a neurologist.

What hours is BRAD available?

BRAD is available 24/7.

How can the physician use the robot to evaluate a patient?

BRAD allows the specialist to see the patient, monitors and other clinical equipment firsthand. Using BRAD, the specialist can talk to and hear the patient, the ED physician, the nurse and the family members while he/she is performing the visual assessment. The specialist can evaluate pupillary responses and X-rays, and, with the help of a nurse, listen to the patient's heartbeat using a stethoscope.

How much does this technology cost?

Bronson made a one-time investment of \$180,000 in the BRAD technology that provides significant benefits, including:

- Rapid assessment – the patients gets quicker access to a Bronson specialist, which is absolutely critical for patients with stroke symptoms
- Reduced length of stay. When it comes to stroke, “time equals brain”.
- Cost savings – because of the robot, the cost of treatment is reduced and the patient does not need to be transferred to a different facility, which further reduces cost
- Improved outcomes – patients who receive treatment within three hours of the onset of symptoms have a greater chance for a full recovery

What hospitals in the area are using BRAD?

Southwest Michigan hospitals currently using Bronson's regional telemedicine service include Oaklawn Hospital in Marshall, Michigan, and Three Rivers Health in Three Rivers, Michigan.

Where can I get more information about BRAD or other telemedicine efforts at Bronson?

For more information, contact Jackie Davenport, regional nurse specialist at Bronson, at (269) 341-8965.