Clinical Excellence: Evidence-based Falls Prevention Strategies

Bedside Mobility Assessment Tool (BMAT)

The Bedside Mobility Assessment Tool (BMAT) was created to help identify patient mobility function deficits and support caregivers in proactively progressing patient mobility. Benefits of early, proactive, and progressive patient mobility include:

- Preventing patient falls with harm.
- Reducing the risk of respiratory and cardiovascular complications.
- Preventing VTEs.
- Decreasing risk of pressure injuries.
- Promoting progression of care.
- Decreasing length of stay, readmission, and mortality.

BMAT also supports healthcare worker safety by promoting appropriate use of Safe Patient Handling equipment.

BMAT is used in most adult and critical care areas and is performed by the nurse. There are 2 parts to the BMAT:

- Determine patient ability, then establish mobility goals
- Ensure it's safe to mobilize, then initiate interventions

The patient's BMAT level is recorded in the patient's record and you will often see it posted on the Communication Board in the patient's room.

Respiratory Care Practitioners and Physical and Occupational Therapists are often involved in mobilizing patients. It is important to understand the BMAT Levels and what the patient's abilities are.

Bedside Mobility - Assessment (BMAT 2.0)

Determine patient ability, then establish mobility goals

Pre-Assessment	Assessment Levels			
	Level 1: Sit & Shake	Level 2: Stretch & Point	Level 3: Stand	Level 4: Step to Walk
Consider contraindications to mobilization: ○ Unable to follow any commands ○ Specific provider orders ○ Medical instability (consider myocardial, respiratory, hemodynamic, orthopedic, cognitive, behavioral, and wound/incision factors) If contraindications present, do not attempt BMAT assessment: patient is considered Dependent. Implement **Dependent Mobility** Interventions if safe to do so. Consider need for PT evaluation.	With HOB ≤ 30 degrees, ask patient **to pivot and sit upright at edge of bed without assistance,** maintaining unsupported seated balance for about 1 minute. Ask patient to **reach across mid-line to shake hands**, then repeat with other hand. * Patients with known limitations (e.g., stroke, amputee, sternal precautions) **may PASS** assessment if able to participate up to the level of limitation and the nurse feels they are safe to progress.	With patient in unsupported seated position, ask patient to **stretch leg, point and flex the toes X3**, then repeat with other leg. * Patients with known limitations (e.g., stroke, amputee, sternal precautions) **may PASS** assessment if able to participate up to the level of limitation and the nurse feels they are safe to progress.	Ask patient to **stand at edge of bed unsupported** for up to 1 minute. *Patients **may PASS** with assistive devices (e.g., use cane, walker, prosthetic, or gait belt) if device used for safety and patient able to perform tasks unsupported.	Standing unsupported at side of bed/chair, ask patient **to march in place using small steps X3** steps for each leg. Ask patient to **step forward, fully shifting weight to front leg before returning** it to starting position. Repeat with other leg.
				
Safe Mode = the use of assistive devices during assessment and mobility interventions to maintain patient and caregiver safety. Always select the device that maximizes the patient's active effort while being safe. **Think Safety 1st, Therapeutic 2nd**	**PASS** Assessment Level 1 ⇨ Proceed to Assessment Level 2 **FAIL** Assessment Level 1 = Patient Mobility is Level 1 **Utilize Progressive Mobility Level 1 Interventions**	**PASS** Assessment Level 2 ⇨ Proceed to Assessment Level 3 **FAIL** Assessment Level 2 = Patient Mobility is Level 2 **Utilize Progressive Mobility Level 2 Interventions**	**PASS** Assessment Level 3 ⇨ Proceed to Assessment Level 4 **FAIL** Assessment Level 3= Patient Mobility is Level 3 **Utilize Progressive Mobility Level 3 Interventions**	**PASS** Assessment Level 4 ⇨ Patient is **ambulatory** **FAIL** Assessment Level 4 = Patient Mobility is Level 4 **Utilize Progressive Mobility Level 4 Interventions**

Bedside Mobility – **Interventions** (BMAT 2.0)

Ensure it's safe to mobilize, then initiate interventions

Dependent	Pre-Intervention Assessment	Intervention Levels: Level 1:	Level 2:	Level 3:	Level 4 To Ambulatory
GOAL: Clinical stability and able to move arm against gravity.  • Turn Q 2hr or log roll PRN • Passive ROM TID—minimum (10 reps per limb) • Chair position 20 minutes TID	**Myocardial Stability** ○ No active cardiac ischemia within past 12hr ○ No new antiarrhythmic agent in past 12hr **Oxygenation / mechanical ventilation** ○ Oxygen Saturation > 85% ○ FIO2 < 85% on ventilator ○ PEEP < 15 on ventilator **Vasopressor Use** ○ No new or increase of vasopressor within 2hr **Interaction** ○ Responds to verbal stimulation ○ POSS > 3 (Sedation Scale) ○ RASS < +3 **Neurologic Stability** ○ No lumbar drain in place ○ No acute or uncontrolled neurologic symptoms ○ If Hemicraniectomy, helmet required to mobilize **If patient meets criteria:** Start interventions at Mobility Level corresponding to patient's Assessment Level. Adjust as needed and progress. **If patient does not meet all criteria:** Begin interventions for DEPENDENT patient. Reevaluate every 12 hours. **Get PT Recommendations** for patients with trauma or special mobility limitations.	***GOAL: Sit upright and able to shake hands reaching across body.***  • Passive ROM TID—minimum (10 reps per limb) progressing to Active ROM • Chair position for all meals TID • Sit on edge of bed with assistance x 15 minutes TID	***GOAL: Sit upright and able to move leg against gravity and stretch and point.***  • Active ROM TID • Sitting on the edge of bed TID • Chair position or out of bed in chair for all meals TID	***GOAL: Increase strength and standing capabilities.***  • Stand at edge of bed TID • Transfer to chair ≥ 20 minutes TID • Out of bed in chair for all meals TID	***GOAL: Increase strength and distance walk.***  • March in place at edge of bed TID • Step forward and back at edge of bed TID • Progress to ambulation: room to hall TID Ambulatory goal = 25 ft or more TID

Use assistive devices and/or safe patient handling equipment as needed **to maintain patient and caregiver safety** during mobility interventions. Select the device that maximizes the patient's active effort while being safe. Think Safety 1st, Therapeutic 2nd

The Mobility Equipment Recommendations by BMAT Level helps you select the appropriate assistive devices and/or Safe Patient Handling equipment to safely mobilize your patient. "Think Safety 1st, Therapeutic 2nd".

Mobility Equipment Recommendations by BMAT Level

A Bedside Mobility Assessment Tool (BMAT2.0) Resource

BMAT Level 1	BMAT Level 2	BMAT Level 3	BMAT Level 4
Dependent / Bedfast	**Chairfast**	**Stand**	**Walking**
Lateral Transfer Devices or Ceiling / Mobile (sling) Lift 	Patient **requires assistance to stand**, but is stable once standing = **Powered Sit to Stand**  Patient **Unsafe to Stand = Ceiling / Mobile** (sling) **Lift** 	Patient Stands, but is **weak or at risk for sudden fall = Non-powered Sit to Stand**  If patient may require assistance to stand = **consider use of Powered Sit to Stand**	Patient able to ambulate, but **weak or at risk for sudden fall = Walking Vest Sling**  Patient able to Ambulate, but **requires assistive device or is at high risk for fall = Gait Belt / Assistive Device** 
Goal: Select the device that maximizes the patient's active effort while being safe. **Think Safety 1st, Therapeutic 2nd**	(May use any Dependent device to maintain patient & caregiver safety)	**If needed, use Gait Belt /Assistive Device**. With special consideration for patients who are at high risk of fall or high risk of injury with fall (May use any Dependent or Chairfast devices to maintain safety)	(May use any Dependent, Chairfast or Standing devices to maintain safety)

Safe Patient Handling (SPH)

Across the globe, caregivers and patients are injured each year in the process of patient transfer or ambulation. Patients can fall while we are moving them. In addition to causing pain and suffering, this can lead to other complications that lengthen their recovery and prolong their hospital stay. For a caregiver, even a minor injury can result in needless discomfort, decreased ability to perform ADLs, and loss of time from work. Serious injuries can result in permanent pain and disability. Most of these injuries are PREVENTABLE by using Safe Patient Handling (SPH) lift equipment and slings correctly AND by exercising proper body mechanics. During your orientation you will learn about the SPH lift equipment available at your facility. For any patient boosting, turning, repositioning or transferring that requires you to lift, push or pull more than 35 lbs., be sure to use the lift equipment appropriate to the patient situation – the BMAT 2.0 can help you determine the right type of lift equipment to use, noting that a patient's BMAT score can change throughout a day. **Never use equipment that you are unfamiliar with and have not been trained to use.** Ask your Manager, Supervisor, Lead, a unit based SPH "Super User" or Program Manager-Caregiver Safety to show you how to use it and to validate your competency.

In addition to assessment tools used by nurses, Fall Prevention strategies/interventions include:

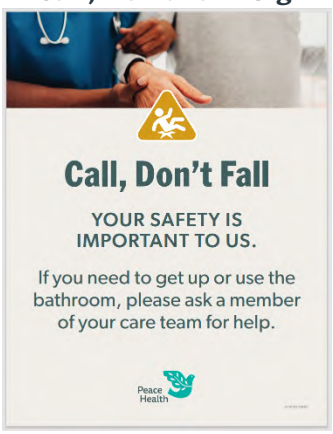
- Use visual indicators and other communication methods to identify fall risk:
  - Handoffs.
  - Communication Board / T.I.P.S. Tool© in patient's room.
  - DMS Board/Huddle.
  - Yellow Fall Risk clip on ID band for patients at moderate- or high-risk for falls.
  - Yellow gown on patients at high-risk for falls *(if safe and appropriate).*
  - Multidisciplinary Rounds.
- Implement **Standard Fall Intervention** for <u>all</u> patients:
  - Belongings and call light within reach.
  - Glasses, hearing aids, and/or mobility aids within reach.
  - Appropriate lighting.
  - Bed/gurney in lowest position and wheels in locked position.
  - Supportive footwear or nonskid socks.
  - Clean/dry floor.
  - Decluttered environment so patient always has clear path.
  - Siderails in up position *(as appropriate).*
- Implement **High Risk Interventions** for all patients at high risk for falls *(as appropriate to care setting and patient population):*
  - Activate bed/chair alarms *(where equipment is available).*
  - Caregiver must stay within arms' reach of patient at all times during toileting, including during use of bedside commode. Seek assistance from nursing team as needed.
  - Patient is placed in a yellow gown as a visual identifier that this patient is at high risk for falls.

Yellow gowns have metal snaps that are not MRI-safe. If your patient is scheduled for an MRI, they must be changed into an MRI-safe gown **prior to transport** and changed back into their yellow gown upon return to their room.

When getting a patient out of bed, press the alarm Silence button. **Do not turn off the alarm!**

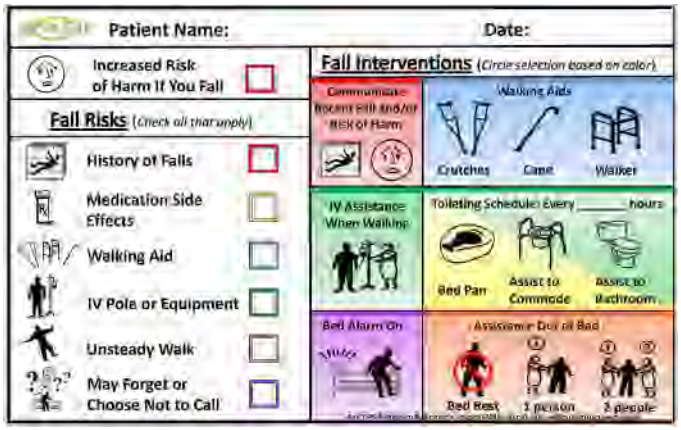
- Implement **Individualized Moderate/High Fall Risk Interventions**, individualized to the patient's needs:
  - Activate bed/chair alarms.
  - Gait belt with ambulation.
  - Chair safety belt applied (patient can remove).
  - Minimize disruptions at night.
  - Interdisciplinary care team meeting.
  - Patient sitter/patient safety attendant.
  - Video monitoring (Telesitter).
- Educate pt./family about fall risk and prevention:
  - Explain the information on the Communication Board and TIPS Tool, individual fall risk factors and mobility interventions.
  - Remind patients to call for assistance before attempting to get out of bed.

"Call, Don't Fall" Sign



Bathroom Safety Sign

T.I.P.S. Tool© Posted on Communication Board



After a patient fall:

- Immediately assess and stabilize the patient.
- Implement measures to keep patient safe.
- Notify provider, Charge Nurse/NTL.
- If you witnessed the fall, initiate a Safety STOP for any fall with serious injury.
- Document any assessments or interventions you performed in the patient's record.

Pain Assessment & Management

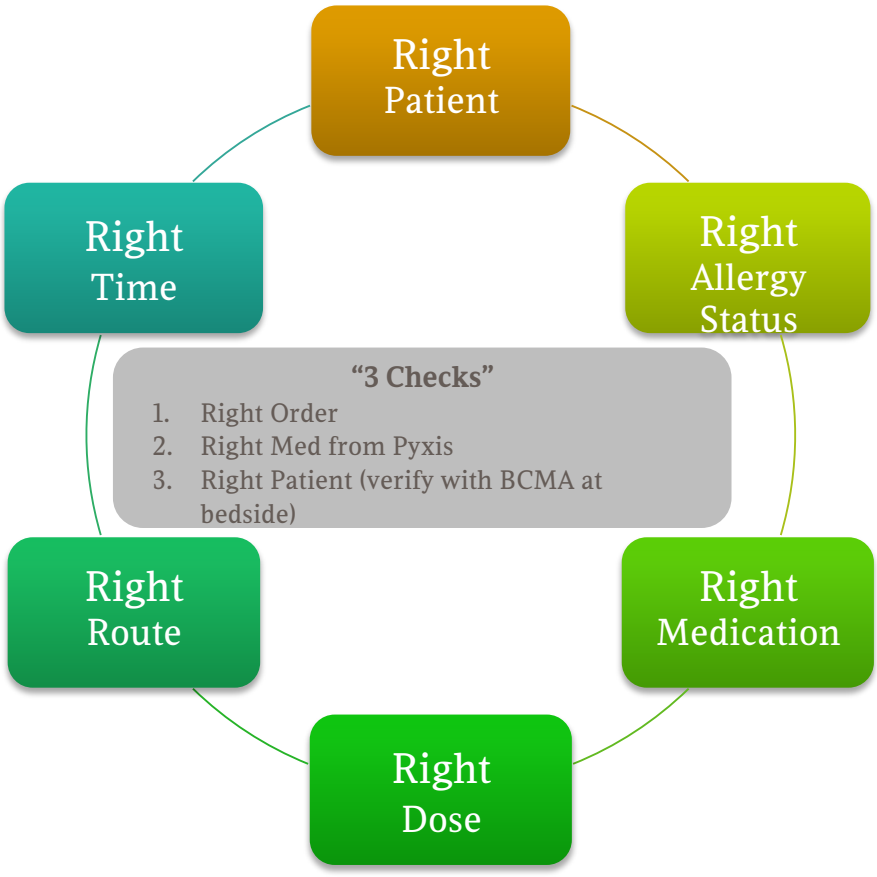
PeaceHealth is committed to assuring an interdisciplinary team approach to the management of pain and discomfort.

- All patients are assessed and treated for pain and asked about their pain management goals/preferences while establishing a pain management plan.
- Managing comfort for patients includes pharmacologic and non-pharmacologic interventions.
- Patient, family, and/or significant others should be active participants in pain control and may participate in facilitating non-pharmacological modalities for comfort (such as distraction and relaxation techniques).

Medication Administration

To ensure patient safety, follow the Medication Administration Policy. Here are some highlights of the policy:

- Medication orders are entered and managed in accordance with Order Management Policy – be aware of the policy as it relates to verbal and telephone orders.
- The order includes appropriate timing of the medication administration – be aware of standard dosing times, time critical scheduled medications, and those that require exact timing of administration.
- All medications are secured and never left unattended – medications that cannot be administered immediately must be returned to the Pyxis for storage.
- Medications may not be pulled for multiple patients at the same time and then stored for later administration.
- Any medication or solution that is transferred from the original packaging to another container must be labeled unless it will be administered immediately.
- Medications are only administered by caregivers with administration privileges (per policy, license, standards of practice and appropriate training).
- Caregivers administering medications must discuss the medication with the patient, the reason the medication is being administered, and potential side effects.
- Caregivers authorized to administer medications will follow the "6 rights, 3 checks (right order, right medication from Pyxis, right patient at the point of Bar Code Medication Administration at the bedside)" process to ensure safe and accurate administration of medications.
- Patients are observed for therapeutic response and potential side effects related to medication administration.



Restraints

Restraints may only be imposed to ensure the immediate physical safety of the patient, a staff member, or others and may only be applies or removed by caregivers who have been trained and validated to do so. Individualized, patient-centered care strategies are considered and/or attempted before the use of restraints. While not an all-inclusive, the table below lists strategies that may be successful in preventing the use of restraints in patients.

OPPORTUNITIES FOR CONTROL

- Give choices, solicit patient and family ideas for alternatives
- Interview for preferences and insights, encourage participation in maintaining safety, involve family

INTERPERSONAL SKILLS & DE-ESCALATION

- Calmly direct patient to "stop" risk taking behavior as a first intervention
- Reorient patient, have reality links available (TV, radio, clock, calendar), repeat frequently to meet needs
- Acknowledge patient's feelings and needs
- Calm, slow speech, relaxed posture. Do not accuse of wrongdoing. Keep activities simple & unhurried
- Provide explanation of treatment
- Evaluate potential barriers to communication related to language or cultural differences
- Reduce number of caregivers present to reduce patient's fear of being harmed

COMFORT MEASURES

- Keep favorite security items near or with the patients (stuffed animal, blanket, etc.)
- Comfortable positioning and opportunities for activity
- Encourage family involvement
- Minimize environmental stimuli

ROOM MODIFICATION

- Place magnetic stop guard banner or tape across doorway to discourage exit while maintaining visibility
- Place a reminder sign to request help that is visible to the patient
- Use 4 rails, only if patient desires and can lower them independently
- Keep frequently used items accessible
- Keep doors/blinds open to visibly see the patient
- Keep observation and/or bathroom light on after dark

MONITORING

- Companionship- Staff or family stay with the patient. Educate family to risk and benefits
- Room near to or visible from nursing station
- Use electronic movement sensor devices as appropriate
- Use remote video monitoring (if available)

THERAPY MODIFICATION

- Keep procedural equipment from patient's view as much as possible to minimize anxiety
- Provide call device easily accessible to patient. Instruct patient/family to call for assistance
- Keep ambulatory devices accessible
- Secure patient when in a wheelchair, chair stretcher or bed using properly applied devices, which can be removed independently, as appropriate. Use lower bed, Geri-chair as appropriate (adults)

DISTRACTION

- Offer safe distraction tools, e.g., books, music, stories, etc. to decrease anxiety, fear and frustration
- Provide distraction and/or diversion activities (TV, music, videos)

If you are caring for a patient in restraints, monitor the patient for signs of physical and psychological distress and intervene or report them immediately.

Suicide Precautions

When caring for a patient at risk for suicide, here are some things you need to know and do:

- Scan the room for safety risks (e.g., ligature, swallowing, cutting, etc.) at beginning of each shift:
  - ✓ All patient belongings
  - ✓ Plastic bags (replace with paper bags)
  - ✓ Detachable monitor cables (not in use)
  - ✓ Oxygen tubing (not in use)
  - ✓ Oxygen tanks
  - ✓ All unused equipment or electrical cords
  - ✓ All extra linen or gowns
  - ✓ All non-attached hand sanitizer
  - ✓ Non-attached patient soap dispensers
  - ✓ SaniCoths / bleach wipes and containers
  - ✓ All other chemicals
  - ✓ Unsecured sharps containers
  - ✓ All other sharps (i.e., scissors)
  - ✓ Extra chairs
  - ✓ Clothes hangers
  - ✓ Patient telephone/cords
  - ✓ All loose items on stands or overhead tables
  - ✓ Glass or metal silverware
- Do not allow anything to be brought into the room, including items brought by family/visitors.
- Never leave patient unobserved or alone, even when family/visitors present.
- Monitor activities of family/visitors (e.g., handing something to the patient) and intervene or escalate to Security when necessary.
- Always stays within arm's reach of the patient unless there is an imminent threat to personal safety.
- Accompany patient to the bathroom or request help from nursing team.
- Maintain personal safety:
  - ✓ Remain closest to the door
  - ✓ Do not wear anything the patient can grab and cause injury (e.g., lanyard, long hair, earrings, etc.).
- Engage the patient using age- and cognition-appropriate activities such as socialization, TV, and games.
- Utilize de-escalation techniques.
- Report changes in the patient's behavior to the patient's nurse or provider.

Intrafacility Transport

PeaceHealth's "Intrafacility Transport Policy" describes requirements for safely transporting patients within the PeaceHealth hospital setting:

- Patient identification
- Infection control requirements
- Appropriate mode of transportation
- Appropriate transport personnel
- Patient care equipment and supplies
- Patient assessment and monitoring
- Medication administration
- Hand-off communication between caregivers
- Documentation requirements, including Ticket to Ride.

The "PeaceHealth Intrafacility Transport Table" provides guidance to ensure caregivers with the appropriate resources, skills, ability, and training accompany the patient during transport. Note that this Table is to be used as a guideline. It is not intended to replace prudent and sound clinical judgement nor address all clinical situations.

Medical Emergencies, Rapid Response Team, and Code Blue

Be sure you know how to activate a code and how to respond in the event of an emergency.

Many facilities have a Rapid Response Team (RRT): a group of specially trained clinicians who are available to respond to potentially life-threatening situations involving a patient, family member/visitor or caregiver. They can evaluate the individual and determine the next course of action to take. Activate the RRT for:

- Respiratory Rate (RR) < 8 or > 30 breaths per minute.
- Threatened airway or persistent change in oxygen saturation (SpO2) < 90% with O2.
- Acute change in level of consciousness (LOC), lethargy or seizure.
- Signs or symptoms of stroke.
- Heart Rate (HR) < 40 or > 120bmp.
- Systolic Blood Pressure (SBP) < 90 mmHg or > 200mmHg.
- Urinary output < 50 ml in 4 hours.
- Change in patient coloration: lips, face, or limbs pale, dusky or blue.
- Family or staff member worried about patient's status/condition.
- New onset or unrelieved acute pain.

Remember: if you're worried about a patient, family member/visitor or caregiver, activate the Rapid Response Team. It is never a bad call if someone is in distress or meets the clinical criteria above.

Be prepared to respond in the event of a Code Blue. As appropriate to your role:

- Identify the location of the Code Cart on your unit.
- Review the contents of the Code Cart so you can quickly find supplies and equipment during a Code Blue.
- Know how to use the defibrillator and pads.
- Actively participate in Mock Code exercises on your unit.

Think BE FAST for Stroke Recognition and Response

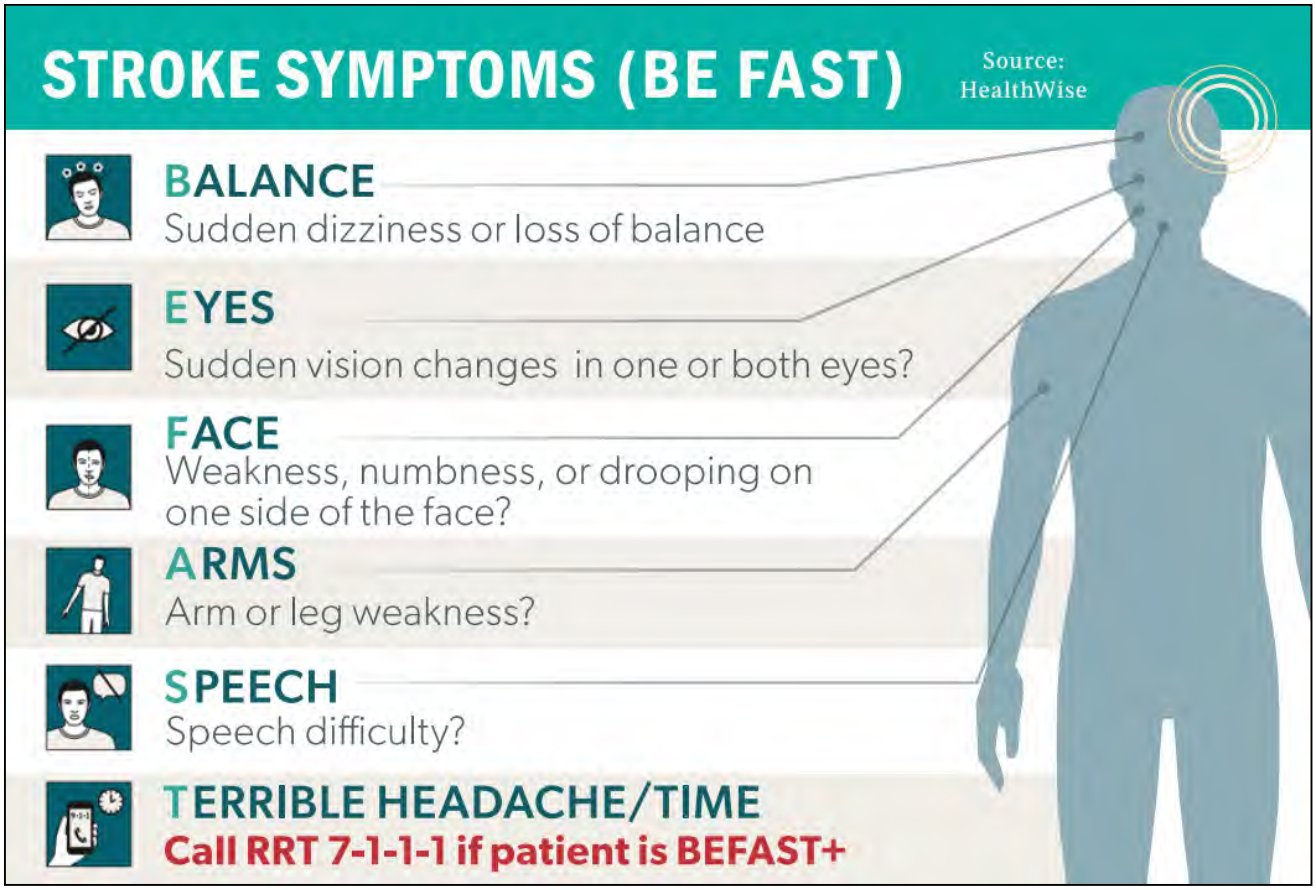
A stroke attack is a brain injury that occurs when a blood vessel to the brain becomes blocked or bursts, cutting off blood flow and oxygen to the brain. Stroke is the number 1 cause of disability and fifth leading cause of death in the United States. It is the second leading cause of death in the world.

There are two types of strokes:

- Ischemic: caused by a clot that restricts blood flow to the brain
- Hemorrhagic: caused by bleeding in the brain

A stroke attack is a life-threatening emergency and requires immediate intervention to prevent brain injury and long-term disability or death.

Early recognition is critical to taking action quickly. We use the BE FAST mnemonic to help us remember the common signs of a stroke:

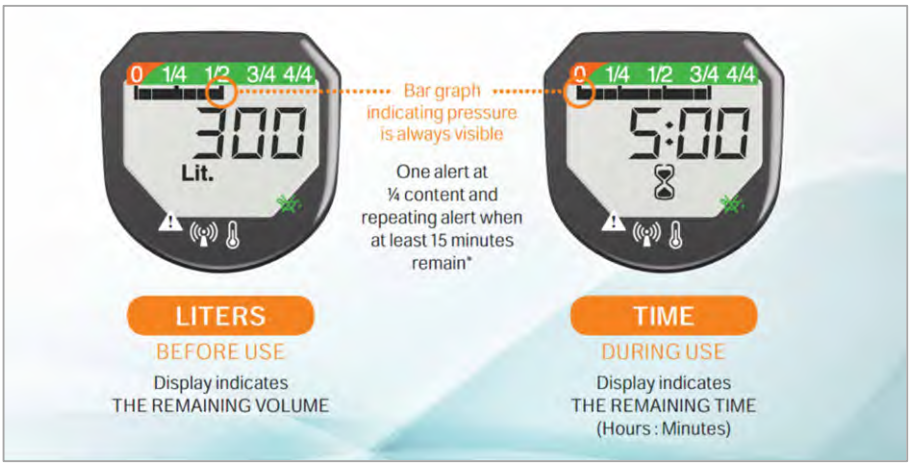


If you or someone around you experiences symptoms of a stroke, act fast! If you are inside the hospital, call 7111 or the emergency number for your hospital to activate the Rapid Response Team. If you are outside the hospital, call 911.

Stroke affects any age, gender, or race. However, 80% of strokes can be prevented through lifestyle changes and health screenings.
Treatment, including thrombolytics or thrombectomy, are available but only effective if implemented quickly.
BE FAST and you may save someone's life, including your own!

INTELLI-OX+™ Oxygen Tanks

We use INTELLI-OX+™ O_2 tanks at PeaceHealth facilities. The digital display allows you to see a bar on how much volume of gas is in the cylinder, in addition to a digital read out. Instead of PSI, it reads liters left in the cylinder. The regulator calculates and displays the remaining time in the cylinder for the patient's specific liter low. There are repeating visual and audible alerts at ¼ content remaining and at 15 minutes of the selected flow rate remaining. The 15-minute alert will repeat every 15 seconds until the cylinder is empty or turned off. **Note: the alert is quiet and may be difficult to hear! Do not rely on an alert to let you know when a tank is running low: monitor the tank closely during use.**



REMINDER: Follow your facility's procedures to ensure safe storage of oxygen and all medical