e: info@thebcat.com
e-fax: 855.850.8661
w: thebcat.com

Falls Mitigation: A Brief 5-Variable Model for Post-Acute Residents

Falls are common in U.S. nursing facilities as approximately half the residents fall annually. About 1 in 3 of those who fall will do so two or more times in a year. Falls often have serious consequences, especially for frail older residents.

There are numerous falls prevention programs. Unfortunately, most have not demonstrated practical and efficacious use. The BCAT® Research Center has developed an approach to identify falls risk using a simple 5-variable model. The scale is not intended to be inclusive of all contributory factors, but it is designed to balance brevity and accuracy. It can be used at any time and is designed for residents who are ambulatory. It can be used by nursing staff, rehab clinicians, and other professionals working in long-term care settings.

The scale is derived from general empirical evidence and two BCAT® studies conducted in nursing homes and senior living communities. The role of cognition in general, and practical judgment in particular, is emphasized in this model. The scale can be used to determine risk for specific residents, but it should also be used dynamically to judge falls risk as residents are prescribed medications and have changes in health status. For example, if a resident is prescribed new pain medications or psychotropics, the falls risk may increase.

e: info@thebcat.com
e-fax: 855.850.8661
w: thebcat.com

The BCAT® Falls Mitigation Scale (FAMS)

Variable	BCAT® Test System Cut Scores
Previous falls	• 3 points = 1 or more falls within previous 30 days • 2 point = 1 or more falls 31 days to six months previous. • 0 points = no falls within the previous six months.

Cognitive impairment (inclusive of delirium)	• 3 points:
	  ➢ BCAT® total score below 25,
	  ➢ BCAT® ECFF score below 6,
	  ➢ BCAT® CTM score below 20,
	  ➢ KPT Judgment score below 6,
	  ➢ BCAT-SF® score < 11,
	  ➢ BCIS® score < 9
	• 2 point:
	  ➢ BCAT® total score between 25-43,
	  ➢ BCAT® ECFF score equal to 6,
	  ➢ BCAT® CTM score between 21-25,
	  ➢ KPT® Judgment score equal to 6,
	  ➢ BCAT-SF® score between 11-18,
	  ➢ BCIS® score between 10-12
	• 0 points:
	  ➢ BCAT® total score above 43,
	  ➢ BCAT® ECFF score equal to 6-7,
	  ➢ BCAT® CTM score between 26-30,
	  ➢ KPT® Judgment score equal to 7-8,
	  ➢ BCAT-SF® score above 18,
	  ➢ BCIS® score above 12

Chronic illness (inclusive of cardio-vascular) and/or movement disorders (including balance/gait issues)	• 2 points = patient has a primary movement disorder. • 1 point = patient has 2 or more chronic illnesses not including a movement disorder. Must include cardiovascular. • 0 points = patient does not have a movement disorder and does not have at least two chronic illnesses.
Psychotropics, and any sedating medication including opioids	• 2 points = patient taking at least one antipsychotic, sedative-hypnotic, opioid, or sedating drug. **Patients with recent increases in dosage are especially at risk.** • 0 points = patient is not taking at least one antipsychotic, sedative-hypnotic, opioid, or sedating drug.
Visual deficits (with correction)	• 2 points = patient has severe deficits in at least one eye. • 1 point = patient has mild-moderate deficits in at least one eye. • 0 points = patient does not have visual deficits.

e: info@thebcat.com
e-fax: 855.850.8661
w: thebcat.com

Scoring for the FAMS

Total Score	Falls Risk
10-12	Relatively high
6-9	Moderate
0-5	Relatively low

Note: For persons with moderate-relatively high risk, review the Falls Risk Mitigation Checklist.

Falls Mitigation Checklist

- ☐ Consider medication side effects and /or interactions.
- ☐ Consider newly prescribed and or increases in the dosage of psychotropic medications (first 72 hours is the highest risk).
- ☐ Ensure adequate sleep, nutrition, and hydration.
- ☐ Avoid or limit alcohol consumption.
- ☐ Assess hearing and vision regularly.
- ☐ Ask residents for pain ratings at each visit.
- ☐ Keep personal belongings used frequently within reach (glasses, phone, etc.).
- ☐ Ensure lighting is appropriate for pathfinding.
- ☐ Ensure residents have nonslip, well-fitting, and adequate footwear.
- ☐ Ensure the environment is safe with minimal clutter and walkways are clear of hazards.
- ☐ Keep residents closest to nursing unit and perform frequent rounds.
- ☐ Educate residents to use the call bell system and ensure it is within reach.
- ☐ Consider creating a toileting schedule.
- ☐ Consider bed placement and proximity to bathroom, door, etc.
- ☐ Ensure residents are offered/attends daily planned activities (increase the frequency of activities programs with increased risk level).
- ☐ Offer residents an opportunity to routinely participate in cognitive stimulation and/ or engagement and/or physical movement activities.
- ☐ Consider the impact of Behavioral and Psychological Symptoms of Dementia (BPSDs).
- ☐ Consider heightened fall risk associated with the presence of sundowning behaviors.
- ☐ Consider referral to rehab (if not already on caseload) to evaluate for contributing deficits in balance, strength, ADLS, the need for an assistive device or interventions to address underlying cognitive skills.