

Be Steady Fall Prevention
Exercise Program
for
Individuals Living with Dementia
Using Teepa Snow GEMS[®]



Be Steady Fall Prevention Exercise Guide for Individuals Living with Dementia is an interdisciplinary approach based on the Otago program. Developed by the New Zealand Falls Prevention Research Group, Otago is an evidence-based approach to prevent falls in high-risk, older adults with demonstrated impairments in strength, balance and walking. The Carolina Geriatric Center at the University of North Carolina with the help of the Center of Disease Control, provides the educational and clinical resources for this effective and accessible program. For individuals who engage in the Otago exercise program, fall risks have been shown to be reduced by 35%. Be Steady provides a way to modify the Otago exercises for individuals living with dementia. This program incorporates the residual abilities of these individuals to reduce the risks of falls.

The GEMS® Brain Change Model created by Teepa Snow recognizes the dynamic nature of the human brain and its abilities. Unlike other cognitive models, it acknowledges that everyone's abilities can change in a moment. Modifying environments, situations, interactions, and expectations will create either supportive positive opportunities or result in distress and a sense of failure. Just as gemstones need different settings and care to show their best characteristics, so do people. Rather than focusing on a person's loss when there is brain change, seeing individuals as precious, unique, and capable encourages a care partnership and is the core of this model. Providing supportive settings for everyone, including care providers, allows them to use what they have to be their best. The GEMS® advocate that everyone living with brain change when given the opportunity will shine.

[Reference: Teepa Snow and Positive Approach® to Care Team]

The most important thing to remember when developing an exercise program for residents with living with dementia is to keep in mind their current functional/cognitive level. This level can be objectively determined by completing the Allen Cognitive Level Screen (ACLS), Global Deterioration Scale (GDS), Functional Assessment Staging Test (FAST) or other standardized, cognitive assessments. The scores will serve as a guide to determine the Teepa Snow Gem level. This chart provides a reference for dementia stage comparison. Please note the Be Steady Exercise Program for Individual Living with Dementia will not be targeted for individuals who are Sapphires (normal) and Diamonds (mild cognitive impairment). For these individuals, the regular Otago program will be used.

Implementation Timeline

1. Present the program outline to the administrator and the director of nursing for approval. Any questions or concerns are addressed to optimize a successful implementation process. Provide a copy of the Otago booklet for the team to review.
2. Discuss the program with members of the interdisciplinary team including nursing, therapy, activities, restorative and MDS coordinator. It is very important that everyone understands the fundamentals of the Otago program. Provide a copy of the Otago booklet for the team to review. Determine specific team members who will be leading the exercise groups in addition to the program's moderator to serve as the coordinator.
3. The monthly resident council meeting is an opportunity to describe the program and encourage participation in the scheduled groups.
4. Dementia staging is scheduled to determine the resident's GEM® level.
5. Facility staff education on the program to include nursing, dietary, activities and restorative. Support of resident participation in the program is a key component of a successful implementation.
6. Informational letter sent out to all families and residents
7. Program roll out with Be Steady Kick Off event. Invite all residents, family members and staff to participate in the event.
8. Re-assessment of program impact through fall reduction data analysis. After 3-4 weeks, review recent falls data with the director of nursing. Determine if any improvements were made over the initial course of the program. Consider any adjustments which may be needed to improvement the success of the program.

Data analysis has shown the prevalence of falls occur a specific time of day when activity options may be limited. The Be Steady exercise program is recommended to be provided three times per week during the time identified as most problematic. This serves two purposes: to create a consistent schedule for exercises in addition to providing an additional layer of patient supervision. Data analysis of fall patterns will be helpful with the timing of the Be Steady exercise program. In many sites, fall frequency may occur during the second shift. In this case, the exercise class is provided three times per week in the early evening following dinner.

As with all individuals, leading a physically active lifestyle can have quite a significant impact on the wellness of people living with dementia. Exercise is beneficial for physical and mental wellbeing. During each program, play music from their era. This can include big band, jazz, showtunes, etc. Most residents seem to enjoy the background music. You may even notice some of them dancing, tapping toes and singing along to the music which is therapeutic in itself!!

Any resident who sustains a fall will receive an invitation to participate in the program. After 3 months of program participation and no repeat fall incidents, the resident will be transitioned out of the program as a mandatory participant. Ultimately, each individual has a choice to participate but we do strongly encourage their compliance to promote functional mobility by increasing strength, flexibility and dynamic balance through a consistent exercise program. This program can easily adapted to any skilled nursing or assisted living community. The exact specifics of your program will depend on the data from your facility.

Post-Fall Huddle

Post fall huddles are a vital component to the comprehensive Be Steady Falls Prevention program. This timely comprehensive assessment can significantly increase our understanding of the complexities of falls and ways to impact the safety of our residents. A daily post-fall huddle meeting to discuss all falls will help to guide referrals to the exercise group along with other strategic interventions. A fall or near fall is an automatic invitation to the Be Steady Exercise program.

Signs of Success

The Be Steady program will provide a valuable component to your QAPI fall prevention program. Over time, you will create a facility-wide approach to minimize declines in flexibility, balance and strength. This can be directly correlated with the number of falls which occur with short and long stay residents. This will be reflected in your quality measure reporting linked to the facility's CMS Five Star Rating.

Dementia Staging Comparison

Alzheimer's Association	Developmental Age Comparison	Allen Cognitive Level	Teepa Snow GEM® Level	Functional Assessment Staging Test (FAST)	Global Deterioration Scale (GDS)	MDS Nursing Levels of Assistance (Section G)
Normal	25+ years	6	Sapphire	1 or 2	1 or 2	Independent
Mild Cognitive Impairment (MCI)	Teens to early 20's	5	Diamond	3	2 or 3	Supervision
Early Stage	4 to 10 years	4	Emerald	4 or 5	3, 4 or 5	Limited Assist
Middle Stage	18 months to 3 years	3	Amber	6	6	Extensive Assist
Late Stage	12 to 18 months	2	Ruby	7	7	Total Dependence
End Stage	Infant	1	Pearl	7	7	Total Dependence

<p>Teepa Snow GEMs® Source: www.teepasnow.com</p>	<p>Narrative</p>
<p>Emerald (early stage)</p>	<p>Sees self as able and independent with limited awareness of changes in ability. Lives in moments of clarity mixed with periods of loss in logic/reason/perspective. Understanding and use of language changes, vague words and many repeats. Cues and support help when getting to/from places and doing daily routines. Awareness of time, place and situation will not always match current reality. Strong emotional reactions are triggered by fears, desires, or unmet needs. Needs to know what comes next: seeks guidance and assistance to fill the day</p>
<p>Amber (middle stage)</p>	<p>Focus on sensation seeks to satisfy desires and tried to avoid what is disliked. Environment can drive actions and reactions, without safety awareness. Visual abilities are limited: focus on pieces or parts not the whole picture. What happens to or around an Amber, may cause strong and surprising reactions. Enters others' space and crosses boundaries to meet own needs. Has periods of intense activity; may be very curious or repetitive with objects or actions. Care is refused or seen as threatening due to differences in perspective and ability.</p>

Teepa Snow GEM®	Be Steady
Emerald	<p>Movers and Shakers exercise group is provided 3 times per week for 30 minutes. Emeralds are still able to complete most exercises. They view themselves as being very independent with limited awareness to change in their abilities. It is important to provide close supervision for them for safety awareness. The exercise program consists of mainly seated exercises and stretching with a few standing exercises at the end of the session. Refer to Appendix A for specific exercises.</p>
Amber	<p>On the Go exercise group is provided three times per week for 30 minutes. This program consists of 15 minutes of structured exercises followed by a 10-15 minutes of an activity. The exercises include stretching and seated exercises for safety. The group is placed in a circle while participating to allow each resident to follow the instructor and mimic other group participants. The amount of time spent with this group is solely dependent on their behaviors that day. On a good day, a lot can be accomplished. However, there are other days where it may be very difficult to get everyone to settle and participate. Continue the group throughout the scheduled time and focus on those who appear to be paying attention and following instructions. Some residents will get up and wander out of the room ... that is okay! Refer to Appendix A for specific exercises.</p>
Ruby and Pearls	<p>These special residents will not be suitable for group sessions. An individualized maintenance program for active assisted and passive range of motion is recommended. Keep all joints in mind with this program. Proper wheelchair and bed positioning are both key components to minimize fall risks.</p>

Memory Care Exercise Program (Appendix A)

The memory care unit/dementia specific exercise program details are included for reference. The exercise program has been determined by GEM® level to be most beneficial for the residents.

Be Steady Fall Prevention is designed to be a facility-wide program. All staff members can play an important role through resident encouragement and education on the benefits of participation. This will create a true village of support to facilitate movement, minimize risk of decline and promote fun with others! They can also encourage the residents to participate and educate them on why it would be a great idea to participate!

Family Letter (Appendix B)

A sample letter is available to use as a template for communication to all resident families. Use of the facility or Functional Pathways letterhead is recommended for this letter.

Resident Letter (Appendix C)

A sample letter is included to use as a template for communication to residents participating in the program. This can be hand delivered to each resident. Use of the facility or Functional Pathways letterhead is recommended for this letter.

Weekly Reminder Cards (Appendix D)

Created for each resident assigned to participate in the exercise group. Reminder cards delivered to residents every Monday morning.

Monthly Schedule (Appendix E)

1. The moderator of the program will establish a monthly schedule to supply to the interdisciplinary team. Once you know who will be on board with instructing the program, a monthly schedule will keep things organized.
2. Spiral bound Otago Exercise books – available upon request from the Functional Pathways corporate office.
3. Log created in Excel – To keep track of the participants from each date. Most important for those who are “mandatory” participants.
4. Each facility can determine what will work best for their building. An e-mail is sent out to all instructors asking if there are any nights/days they cannot participate with the class. Once it has been discussed, the monthly schedule is generated and distributed via e-mail and in paper form to each instructor.
5. Program is offered 3 nights per week at 6:45PM.
6. The morning of the program, a list of mandatory participants as well as frequent participants from the facility is given to the instructor for day’s event. This list is also posted in the nursing office for the nurses to be aware of residents who should be attending.
7. Program lasts for 30 minutes.

8. Fifteen minutes prior to the start of the class, the instructor announces on the overhead speaker that the Be Steady exercise program will begin in 15 minutes in the community room. This allows for residents to make their way down and for the nursing staff to start gathering those who are need assistance.
9. The instructor is located at the front and center of the class with all participants seated in a circle. Ensure that all participants have a clear view of the instructor.
10. Music is played during each session – 40-50's, Frank Sinatra, etc.
11. Encourage a sense of fun and engagement during the session.
12. Begin at the front of the Otago Exercise booklet and make your way through the program. Aid those who may require it for increased safety.
13. Throughout the program provide education to the residents on why they are doing what they are doing.
14. Before each of the residents leave, I kindly ask them to each complete a safe sit to stand transfer – including proper hand placement, wheelchair brakes, etc.

Program Itinerary:

- 6:30PM Announcement made over the facility intercom to communicate to the residents that the program will begin in 15 minutes in the community room. **“Good evening residents, the Be Steady exercise program will begin in approximately 15 minutes in the community room. Hope to see you there!”**
- 6:30-6:45PM This time is spent walking around gathering resident who are participating and assisting them to the community room. An updated list of the mandatory and frequent participants is given to the instructor for the night as well as posted in the nursing office. The nurses play a vital role in recruiting the residents for the program. Be sure to communicate with them about the importance of encouraging the resident to participate.
- 6:45PM Start with light stretching in the beginning to allow a few minutes for the “stragglers” to join in the program.
- 6:45-7:15PM Work through the Otago program from front to back. Make sure that those residents who require stand by assistance for safety get the help they need – whether it is from the instructor or an aide.
- 7:15PM Conclusion of the program. Remind them of when the next session will occur.

APPENDIX F Completion of the Program Certificate

After 3 consecutive months of perfect attendance in the program and no falls, the resident will have successfully completed the program. At this time, the residents name will be removed from the mandatory participant list, they will be invited to a dinner at the facility with the instructors and will received a certificate of completion

Appendix A Memory Care Exercise Program

Be Steady Group	Specific Exercises
Movers and Shakers (Emerald)	<p>Start with a lot of stretching (All Seated):</p> <ul style="list-style-type: none"> Head movements left to right Head movements up and down Lateral bending of the neck Chin Tucks Shoulder Shrugs Shoulder rolls forward Shoulder rolls backwards Arm circles forward Arm circles backwards Lateral trunk stretching to the left and right BLE Heel raises BLE toe raises Long Arc Quads Hip Flexion Standing heel raises with support Standing hip flexion with support Standing hip abduction with support Squats with support Chair push ups Sit to stand transfers with BUE support <p>All exercises are completed as a group. As previously stated, close supervision is provided to those who may require it to reduce the risk for falls. If someone appears unsafe, please do not complete exercises that may increase their risk for a fall. Do exercises as they appear appropriate for each of the residents in the group.</p>
On the Move (Amber)	<p>**Start with a lot of stretching (All Seated):</p> <ul style="list-style-type: none"> Head movements left to right Head movements up and down Lateral bending of the neck Chin Tucks Shoulder Shrugs Shoulder rolls forward Shoulder rolls backwards Arm circles forward Arm circles backwards Lateral trunk stretching to the left and right BLE Heel raises BLE toe raises Long Arc Quads Hip Flexion

	<p>Chair push ups</p> <p>Activities to fill the remainder of the program include:</p> <ul style="list-style-type: none">Noodle BallBalloon VolleySit to stand transfer trainingBed mobility training for those appropriate and ableWalking outside in the courtyardDigging in the plant boxDancing to music
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Appendix B: Family Letter Sample

Dear Family Member,

My name is _____ and I am the director of rehabilitation for the therapy department at _____. I am writing to you to share an exciting opportunity for your loved one! We will be starting an evening exercise program called Be Steady. This program will be offered to all residents of the facility 3 times per week. This program is being implemented to raise awareness about fall prevention. Unfortunately falls are prevalent in this population. We would like to help reduce this potential risk for falls by offering a free program.

The program will consist of Otago Exercises will be led by a community staff member. This specific group of exercises has been validated and has been shown to improve strength and balance - which will in turn reduce the risk for falls. All residents of the facility are invited to attend the program, however, there is one catch.

The way the program is designed to work is as follows: Any resident who sustains a fall within the facility will be given a personalized invitation to participate in the Be Steady program. We ultimately would like for that resident to attend the program for the duration of 3 months without any absence. If the resident is able to complete 3 consecutive months of the program and be fall free, they will then graduate from the program. They will receive a personalized certificate and be invited to a dinner here at the facility to congratulate them on a job well done. They are more than welcome to continue with the program following their completion.

I ask that you please encourage your loved one to participate in the program. The program will take place in the evening following their meal. If you are here visiting at that time, I strongly encourage you to come join in on the program with them! Everyone can benefit from this program, but they have to put in the effort and contribute their time. Keep your eye out for a Family Exercise event where you will be invited to participate with your loved one!!

If you have any questions or concerns about the program, please feel free to call me at the facility at _____ or email me at _____.

I look forward to participating in the program with your loved ones!

Sincerely,

DOR Name

Appendix C: Resident Letter Sample

Dear Resident,

My name is _____ and I am the Director of Rehabilitation for the therapy department at _____. I am writing to you to share an exciting opportunity for you! We will be starting an evening exercise program called Be Steady. This program will be offered to all residents of the facility 3 times per week. This program is being implemented to raise awareness about fall prevention. Unfortunately falls are prevalent in this population. We would like to help reduce this potential risk for falls by offering a free program.

The program will consist of Otago Exercises will be led by a community staff member. This specific group of exercises has been validated and has been shown to improve strength and balance - which will in turn reduce the risk for falls. All residents of the facility are invited to attend the program, however, there is one catch.

The way the program is designed to work is as follows: Any resident who sustains a fall within the facility will be given a personalized invitation to participate in the Be Steady program. We ultimately would like for you to attend the program for the duration of 3 months without any absence. If you are able to complete 3 consecutive months of the program and be fall free, you will then graduate from the program. You will receive a personalized certificate and be invited to a dinner at the facility to congratulate you on a job well done. You are more than welcome to continue with the program following their completion.

I encourage you to participate in the program. The program will take place [include date, time and location] The activity will last for a half hour. Everyone can benefit from this program, but you have to put in the effort and contribute your time. Keep your eye out for a Family Exercise event where you can invite your family to participate with you!!

If you have any questions or concerns about the program, please feel free to call me at the facility at _____ or email me at _____.

I look forward to participating in the program with you!

Sincerely,

DOR name

On The Go Exercise Group

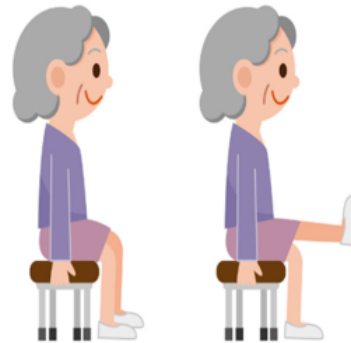
Reminder to join us for class!

Time: Monday at 6:45pm

Wednesday at 6:45pm

Friday at 6:45pm

Place: Activity Room



Appendix E: Sample Instructor Monthly Schedule

April

2020

Be Steady

Instructor Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3 Movers and Shakers Dana 6:45PM	4 On the Go Joan 6:45pm
5	6 Movers and Shakers Lisa 6:45PM	7 On the Go Dawn 6:45pm	8 Movers and Shakers Sherri 6:45PM	9 On the Go Susan 6:45pm	10 Movers and Shakers Marlene 6:45PM	11 On the Go Joan 6:45pm
12	13 Movers and Shakers Debbie 6:45PM	14 On the Go Dawn 6:45pm	15 Movers and Shakers Dana 6:45PM	16 On the Go Susan 6:45pm	17 Movers and Shakers Amanda 6:45PM	18 On the Go Joan 6:45pm
19	20 Movers and Shakers Sherri 6:45PM	21 On the Go Dawn 6:45pm	22 Movers and Shakers Marlene 6:45PM	23 On the Go Susan 6:45pm	24 Movers and Shakers Debbie 6:45PM	25 On the Go Joan 6:45pm
26	27 Movers and Shakers Jess 6:45PM	28 On the Go Dawn 6:45pm	29 Movers and Shakers Lisa 6:45PM	30 On the Go Susan 6:45pm		

Appendix F: Sample Certificate of Completion

Congratulations!

Participant

Has completed Be Steady Exercise Program



Clinical Instructor

Date