

Process Evaluation Table

Strategies	Key Activities	Indicators for the completion and quality of the activities	How will you collect the data?	When to collect the data?
To provide training to all staff and to ensure that all the staff have the competence in conducting falls screening and prevention and correctly following the FRAM and Risk Register processes by the end of February 2021	Prepare and implement staff education and training programmes pertaining to falls screening and prevention	Short quizzes to test staff's knowledge and retention of information given in the training programme	Questionnaires and/or face-to-face interviews	Within 24 hours of every training session
	Conduct staff assessments with regards to their knowledge regarding falls prevention, FRAM, and Risk Register processes	A percent score of at least 80% or above in assessments should indicate reasonably good knowledge of falls prevention, FRAM, and Risk Register processes, improvement in staff's ability to prevent falls as indicated by the implementation of new processes to prevent falls in a given period of time	Questionnaires and/or face-to-face interviews, on-the-job staff observation, reports of new processes implemented to prevent falls in the facility	Every two weeks after the implementation of staff training programmes
	Collect data regarding changes in staff performance following the training program with regards to falls prevention	Suggestions for implementation of new strategies given by staff following the training programmes for falls prevention	Set up a suggestion box where staff can write down their suggestions and place them in the box	Review the suggestions every day
To implement Falls Risk Assessment Method (FRAM) in all 6 residential facilities and to ensure all residents are fully assessed and specific falls prevention strategies are included in the care plan for	Set up a screening process where a document needs to be filled out at every shift handover. This document will alert the incoming shift of any possible risk factors or conditions that can lead to fall	A well-maintained record of complete shift handovers indicating risk of falls for each resident along with care plans and individualized interventions	A regular review of shift handovers checking for accuracy and completeness	Weekly review of shift handovers of each resident

each resident between by the end of June 2021;	injuries in the patient.			
	If a patient is found to belong to a high-risk for falls category, develop individualized interventions to minimize the possibility of falls in the patient	A well-charted out care plan with individualized interventions for each resident available in patient records and easily accessible by staff, the interventions should be specific to the resident and relevant to their risk factors	Review of each resident's fall risk at the time of admission, review of individualized interventions developed for high-risk residents, assessment of the success of these interventions in preventing falls in the patient by reviewing the number of falls in the resident in a given period of time	Review of individualized interventions within a week of admission of new residents, monthly review of the number of falls in high-risk patients
	Involve high-risk patients in the preparation of their care plans so that they are aware of their risks of falls and can actively participate in minimizing their possibility of falls	A high level of knowledge and understanding on the part of residents about the risk factors and implications of falls in the facility, willingness to cooperate with the staff in minimizing their risk of falls	Interviews with residents asking open-ended questions for understanding their knowledge and cooperativeness in falls prevention	Monthly interviews with high-risk patients
To provide one-on-one session to all residents to develop their confidence in self-identification of falls related risks between March and August 2021;	Preparation of one-on-one programme agenda that will be delivered to residents with the objective of encouraging them to be alert and aware of their risk for falls	A comprehensive programme structure that covers all the important aspects of risk and impacts of falls, a practical component that enables residents to identify their own risk of falls in the facility	A review of the programme structure by different experts in the field, analysis of their feedback and recommendations	Immediately after the preparation of the programme structure
	Training of staff who will work with the residents for implementation of this programme	Well-trained staff with excellent knowledge of the programme agenda and outstanding capability of delivering it to the residents	Objective written assessments to understand staff's knowledge and understanding of the programme, one practice session with each of the trained staff members to assess their ability to deliver the	Immediately after training of the staff members, one more assessment after a month for

			programme to the residents	quality check
	Assessing the success of the programme in preventing falls in the facility	Demonstrated reduction in number of falls in the facility, demonstrated self-reports by residents regarding possible risk factors for their falls in the facility	Review of records of falls in the facility and comparison of numbers before and after the implementation of the programme, interviews with residents regarding the efficacy of the programme and new knowledge retention of risk factors of falls	Weekly review of records, fortnightly interviews with residents
To identify patients at risk of falling or rolling out of bed and purchase and provide low-low bed with an adjacent floor mat to all of these patients by the end of July 2021;	Identification of patients at risk of rolling out of bed at night, determination of number of low beds with adjacent floor mats required	Clear indication of residents who require low beds along with their risk factors for falls, calculation of the total number of residents belonging to this category	A comprehensive review of each resident's requirement of the low bed and floor mat based on their medical history and falls risk	Immediately after preparing the resident list
	Calculation of costs of providing the low beds and floor mats, acquisition of funds for the same	Research of companies who can provide low beds and floor mats at reasonable rates, contact with funding agencies to raise funds for low beds and floor mats	A comprehensive review of the list of companies as well as funding agencies by a panel of experts	Immediately after preparation of the lists
	Acquiring high quality low beds and floor mats for high-risk residents and performing quality checks for their safety	Acquisition of the current number of low beds and floor mats for the high-risk residents, demonstration of quality and safety by the company staff	A thorough check of each bed and floor mat to ensure that they are safe for use by the residents	Monthly quality check of the low beds and floor mats
To provide ongoing support to staff in applying the Fall Risk Assessment Method and Falls	Preparation of training videos that are accessible to staff at all times	Comprehensive and high quality videos designed to cover all aspects of FRAM	Feedback and suggestion forms distributed to the staff to collect data regarding the relevance and	Fortnightly

Register in care plan for residents throughout the project;		and falls risk prevention	usefulness of the training videos	
	Monthly training programmes for staff members revisiting the basic aspects of falls risk identification and falls prevention in the facility	Full attendance for the programme by the staff, satisfactory responses from staff members after the programme	Questionnaires distributed among staff members to test their knowledge and understanding of the programme content, and requesting feedback for improving the content for the next session	Immediately after each training programme
	A helpline number that staff can access in case of any emergency or to clear any doubts regarding falls risk prevention in the facility	A functional helpline number that is accessed by staff members for clearing their doubts on falls risk prevention	A review of the number of times this helpline number is used by staff members, interviews with the staff members to see if they get satisfactory responses upon using this number	Fortnightly

Impact Evaluation Table

Objectives	Indicators of the achievement of the objectives	Methods for data collection and measurements of the indicators	When will data be collected?
30% of all residents and 70% of all residents are able to identify and address falls related risks by May and August 2021 respectively;	30% or above of the residents capable of identifying risk factors for falls by May 2021	Data will be collected using one-on-one interviews with residents to test their knowledge and understanding of risk factors of falls. Based on the responses, it will be determined if the resident's knowledge is sound or lacking with respect to risk factors of falls.	At the end of every month until May 2021
	30% or above of the residents capable of bringing to the attention of the staff risk factors for falls by May 2021	Data will be collected by reviewing patient records to check if resident-identified risk factors are mentioned. Staff interviews will be done to identify residents who are capable of identifying their risk factors for falls.	At the end of every month until May 2021
	70% or above of the residents capable of identifying risk factors for falls by August 2021	Data will be collected using one-on-one interviews with residents to test their knowledge and understanding of risk factors of falls. Based on the responses, it will be determined if the resident's knowledge is sound or lacking with respect to risk factors of falls.	At the end of every month until August 2021
	70% or above of the residents capable of bringing to the attention of the staff risk factors for falls by August 2021	Data will be collected by reviewing patient records to check if resident-identified risk factors are mentioned. Staff interviews will be done to identify residents who are capable of identifying their risk factors for falls.	At the end of every month until August 2021
To achieve zero incident of falling or rolling out of bed amongst residents from	No reported incidents of falls and/or fall injuries in residents	Review of patient records of the facility to check for the number of reported incidents of falls and related injuries	Every month starting from August 2021

August 2021 onward;	No reported incidents of rolling out of bed and/or related injuries in residents	Review of patient records of the facility to check for the number of reported incidents of rolling out of bed and related injuries	Every month starting from August 2021
To increase 80% of all at risk residents' physical balance & strength by 50% by September 2021;	At least 50% improvement in physical balance and strength of at least 80% high-risk residents	Regular and comprehensive monitoring and review by physiotherapists specialising in elderly care, review of physiotherapist reports of residents	Every month after implementation of falls prevention programme
	Self-reported improvement in physical balance, strength, and vigour by the residents	Physiotherapist assessments, interviews with residents regarding their perceptions of improvement of their physical balance and strength	Every month after implementation of falls prevention programme
To reduce the number of falls amongst residents by 80% by September 2021;	Demonstrated reduction in the number of falls amongst residents by 80% or more	Review of patient records at the facility and determination of the number of patient falls reported in a given period of time	Every fortnight after implementation of falls prevention programme
To reduce fractured necks of femur as a result of the falls amongst residence by 80% by September 2021	Demonstrated reduction in the number of fractured necks of femur due to falls amongst residents by 80% or more	Review of patient records at the facility and determination of the number of reported incidents of fractured necks of femur due to falls in a given period of time	Every fortnight after implementation of falls prevention programme

Identification and control of internal validity of the evaluation

Factor that may threaten the internal validity	How may each of the factor threaten the internal validity	How will you address each of the factor in order to control the internal validity
Predisposing underlying conditions in residents	Chronic bone conditions such as arthritis may make some residents more susceptible to falls and management of their falls risk may be more challenging	Residents with such conditions need to be identified and separate individualized strategies need to be developed to prevent and/or manage their falls risk
Residents' willingness to cooperate with the programme	Age-related mental, emotional, and behavioural conditions in residents may affect their participation in the programme thereby affecting the outcomes of the programme	Residents need to be assessed for these conditions and special counseling sessions may need to be arranged in order to enable the residents to actively participate in minimizing their falls risk at the facility
Possible changes in the programme structure as delivered by different staff members	Some staff members may deliver the programme with either more or less enthusiasm, or may add or delete parts of the programme content thereby affecting the outcomes of the programme.	Random checks need to be made during the one-on-one resident training sessions to ensure that staff members are delivering the programme as pre-decided by the coordinators.
Residents may answer in a particular way during interviews due to feeling pressured by researcher expectations	Residents may feel that they need to demonstrate that they have understood the programme content even if they have not, due to expectations placed on them. This may affect the outcomes of the study as the perception of the level of resident knowledge and understanding will be skewed.	Residents need to be assured that their responses will be kept anonymous. They need to be interviewed by people other than the staff members so that they are not pressured or expected to answer in a certain way.