

Trauma Outreach and Injury Prevention: Fall Prevention Program for Older Adults in an Urban Community Setting

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Background/Purpose:
National data reveals falls are the leading cause of trauma and death in patients over 65 years of age. This Trauma Center data also shows that the greatest mechanism of injury across the lifespan is falls and that falls are the leading cause of death for those over age 65. Falls can be prevented. Stepping On is an evidence-based fall prevention program endorsed by the State Health Department and has shown to reduce falls by 31% in this population (Clemson et al, JAGS, 2004). The program was implemented by our trauma center for the community in January, 2016.

Project Design:
Data for this project was collected from October 2016 through October 2017.

Setting:
The fall prevention workshop is set in two alternating hospital locations in an urban setting.

Sample:
Data was analyzed from the last five of nine cohorts. Forty-two participants completed both the pre- and post-surveys, along with the Timed Up and Go (TUG) tests. The age range was 46 to 89 and the average age was 71.

Procedures:
The outcome measure utilized was the Timed Up and Go (TUG) test. Participants are timed as they stand up from a chair, walk 10 feet, turn around and walk back to the chair and sit down. Completing the TUG in 12 seconds or greater, correlates with an increased risk for falls. Participants also completed pre- and post-surveys rating concerns from not concerned at all to very concerned, about falling while doing particular activities. The activities rated were: dressing or undressing; getting in or out of the bath or shower; getting in or out of a chair; going up or down stairs; reaching for something above their head or on the ground; walking down a slope or going out to a social event. The post-survey also asked what steps the participants had taken to reduce their chances of falling since the starting the program, what steps they plan to take to reduce their chances of falling and if the program had reduced their fear of falling.



Stepping On Participant Post Survey

Name: _____ Date: _____

1. Would you say that in general your health is—
 Excellent Very Good Good Fair Poor

2. Since the program started, how many times have you fallen? _____

2a. If you have fallen since this program began, how many of these falls resulted in an injury? _____

3. How frequently do you exercise?
 Daily 3+ Times Weekly Once a Week Not Often Never

3a. Where? Home Gym/YMCA Community/Recreation Center

4. **Since the program started**, what steps have you taken to reduce your chances of falling?
 Talked with family and friends about how to reduce my risk of falling
 Talked with my primary care provider about how to reduce my risk of falling
 Reviewed my medications with my primary care provider or pharmacist
 Made changes in my home to reduce my risk of falling
 Had my vision checked

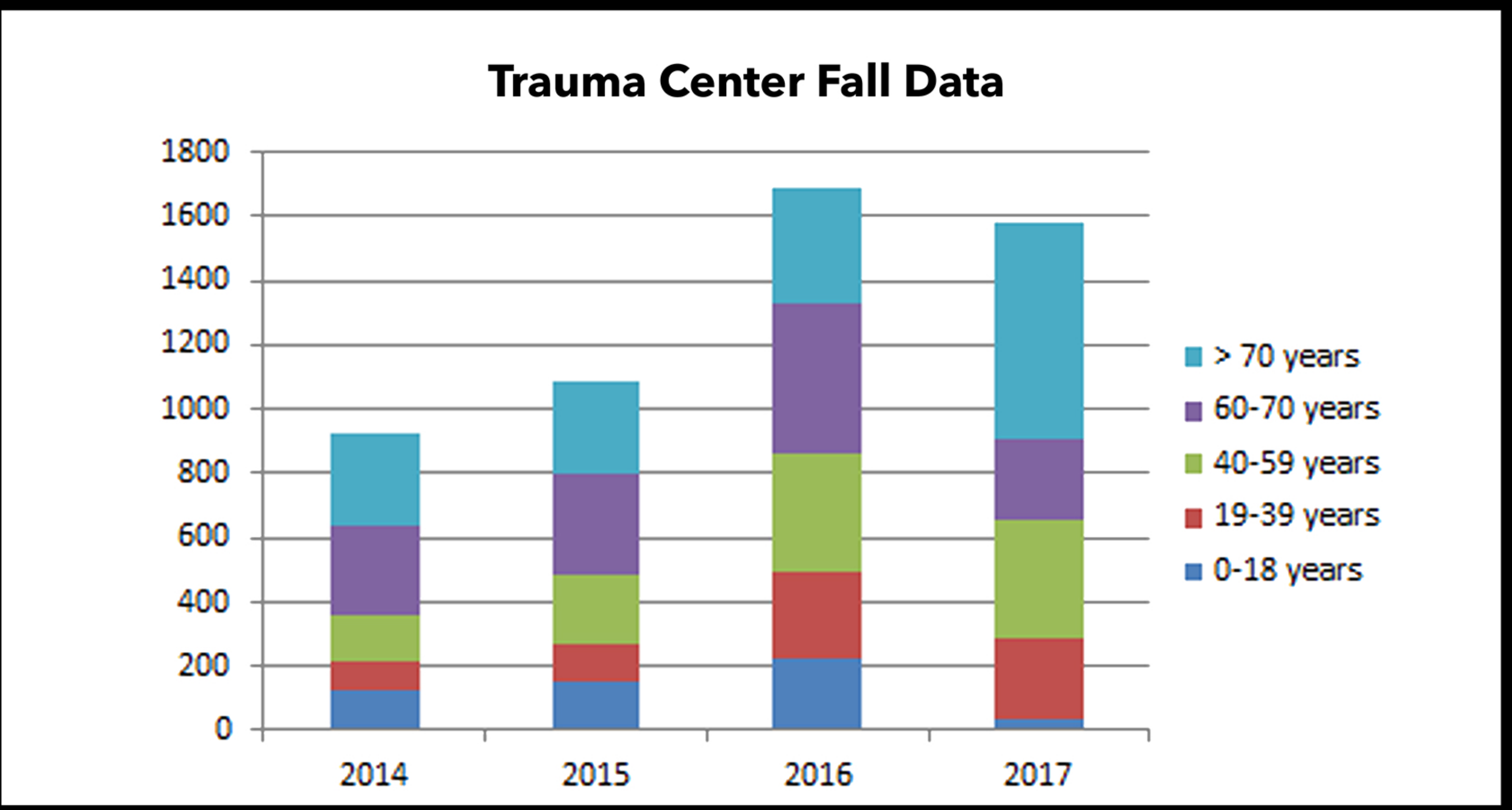
5. **In the next 3 months**, what steps do you plan to take to reduce your chances of falling?
 Continue exercising
 Talk with family and friends about how to reduce my risk of falling
 Talk with my primary care provider about how to reduce my risk of falling
 Review my medications with my primary care provider/doctor or pharmacist
 Make changes in my home to reduce my risk of falling
 Have my vision checked

6. Now we would like to ask some questions about how concerned you are about the possibility of falling. Please reply thinking about how you usually do the activity. If you currently don't do the activity, please answer to show whether you think you would be concerned about falling IF you did the activity. For each of the following activities, please check the box which is closest to your own opinion to show how concerned you are that you might fall if you did this activity.

	Not at all concerned	Somewhat concerned	Fairly concerned	Very concerned
Getting dressed or undressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking a bath or shower	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting in or out of a chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Going up or down stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reaching for something above your head or on the ground	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking up or down a slope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Going out to a social event (e.g. religious service, family gathering or club meeting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Has this program reduced your fear of falling? Yes No

8. Would you recommend the program to a friend or relative? Yes No



Results:
Cohort average TUG time improvements were: 2.14 seconds; 3.22 seconds; 2.99 seconds; 2.21 seconds and 2.09 seconds. Overall TUG scores decreased by an average of 2.53 seconds. Participants also completed pre-and post-surveys for Stepping On. An average of 88% of participants reported a decrease a decrease in fear of falling at the end of the seven week workshop.

Discussion/Conclusions/Implications:
Of the activities measured pre- and post-Stepping On workshops, there was less concern with dressing/undressing, getting in and out of chair, going up or down stairs and reaching for something above your head or on the ground post workshop. Post-surveys revealed 63% of participants made changes in the home to reduce risk of falling and 98% of participants planned to continue exercising. Next steps include implementing a new pre- and post-survey, addition of a six month post-survey and collaboration with the local primary care medical group for referrals to the program. In conclusion, Stepping On is an effective intervention in decreasing fall risk and improving self-efficacy.

References
Clemson et al. The Effectiveness of a Community-Based Program for Reducing the Incidence of Falls in the Elderly: A Randomized Trial. Journal of American Geriatric Society, 52:1487-1494, 2004.