Geriatric Fall Prevention Program in a Level III Trauma Center

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INTRODUCTION

• Marin General Hospital is a Level III American College of Surgeons (ACS) verified trauma program with 24/7 Neurosurgery coverage. The trauma program consists of a trauma medical director, trauma program manager, two trauma registrars, and trauma services specialist.

• The purpose of implementing this program is to address our growing ≥ 65 y/o Marin County population. From 2010 to 2016 Marin County’s ≥ 65 y/o population increased by 3.9%.

OBJECTIVES

• To offer a comprehensive evidence-based injury prevention program.

• Understand the importance of utilizing a shared ownership model, with multiple partners in the community and hospital.

• Educate the community on fall prevention.

METHODOLOGY

• A Matter of Balance (MOB) is an evidence based program developed by Main Health with proven results to reduce the fear of falling in older adults, stop the fear of falling cycle, and increase activity among community-dwelling older adults.

• The program includes eight two-hour small group classes (8-12 participants) led by two trained facilitators. The group shares practical solutions and learns the importance of assertiveness in preventing falls.

• Participants learn strength, endurance, and flexibility exercises which they learn and practice during classes three through eight.

• Participants were initially charged $20.00/person as a materials fee, but later classes were offered free after a grant was obtained.

• Results were measured using validated strength/balance tests (5 sit to stands, 4 stage balance test) and a self-reported survey.

RESULTS

• We trained 29 coaches and completed 6 MOB sessions for a total of 60 participants. Our average age was 75 years old.

• 47.5% of the MOB participants stated, “they have become more steady on their feet.”

• 40% of the MOB participants improved in strength.

• 50% of the MOB participants improved in balance.

• Patients who visit the ED for a fall are given the MOB information and encouraged to sign up via our discharge instructions.

• Our program has demonstrated the ability to help reduce falls in our community. Based on the increased strength and balance data our analysis showed a positive outcome from the program.

2016-2017 Trauma Data

<table>
<thead>
<tr>
<th>Total # all falls</th>
<th>874</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Age</td>
<td>64 years old</td>
</tr>
<tr>
<td>Median Injury Severity Score</td>
<td>5</td>
</tr>
<tr>
<td>≥ 65 y/o Falls</td>
<td>655 (75%)</td>
</tr>
<tr>
<td>Median Age</td>
<td>78 years old</td>
</tr>
<tr>
<td>Median Injury Severity Score</td>
<td>8</td>
</tr>
<tr>
<td>Injuries</td>
<td>Head Injury, Hip fx, Rib fx, Spine fx</td>
</tr>
</tbody>
</table>

Business Plan

• Show cost savings and return on investment.

• Review ACS CD 15-4, & 18-6 for trauma re-verification requirements.

• Obtain Executive support

External Partnership

• Main Health

• Public Health Department

• Area Agency on Aging

• Classes offered at Senior Center, YMCA, & Churches

Hospital Collaborate

• Center for Integrative Health and Wellness

• Risk Management

• Hospital Volunteer Services

Master Trainer

• Need at least 1 Master Trainer

• Cost to train is $1,500 excluding travel cost

Coaches

• 8 hours of training with Master Trainer

• Earn Matter of Balance Coach Certification

• 2.5 hour annual refresher course

• Commit to coach 2 MOB sessions w/in 1 year

Analyze

• Analyze trauma registry

• Utilize heat maps to display high location of injury

Track your progress

• Create spreadsheet of courses completed

• Measure participant strength and balance outcome

• Create a quarterly report and present to hospital committees

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