Update on Validation of MAHC’s Fall Risk Assessment Tool

THE GOOD, THE BAD & THE UGLY!

The good news is that the validation project is moving forward but the bad news is that it is taking longer than initially anticipated.

As you know the MAHC Fall Risk Assessment Tool (FRAT) has not been scientifically tested or “validated” and therefore agencies must use FRAT plus the TUG. MAHC is in the process of having our FRAT validated through the University of Kansas. The study was conducted between July 1, 2010 and December 31, 2010. According to our research partners at the University, our next step is to get the retrospective research proposal through North Kansas City Hospital.

Once the proposal is approved, KU students will review the literature, analyze the data and complete the written report, leading to unpublished results. The final step to the validation process is having the final results published. This step could take up to an additional year when you take into consideration the submission period, the acceptance period, the revision period and then finally the actually publishing period.

Research takes a lot of time but MAHC is excited regarding our FRAT validation and know, in the end, it will be worth the wait.

Non-Adherence to Medications Increases Seniors’ Risk for Falls

Seniors who neglect to take their medications as directed can significantly increase their risk for falls, according to new research. A recent study of Boston-area seniors found that those who occasionally neglected their medications were 50% more likely to fall than those who took their medications as directed. At the Institute for Aging Research at Hebrew SeniorLife in Boston, 246 men and 408 women with an average age of 78 were surveyed for the study. Of the seniors in this group, 376 reported experiencing a combined total of 1,052 falls. Low adherence to medication schedules is easy to screen for, according to researchers. The seniors surveyed for the study answered simple questions such as “Do you ever forget to take your medications?” and “Are you careless at times about taking your medications?” Nearly half (48%) did not fully adhere to their medication schedule, according to the report.
Seniors at risk of falling could soon benefit from some pretty far-out therapies, courtesy of NASA and the National Space Biomedical Research Institute (NSBRI), according to a recent project report. Astronauts who spend time in space typically have trouble readjusting to earth’s gravity, according to a recent NSBRI release. The gravitational changes can cause dizziness and balance issues that sometimes take weeks to overcome. Researchers at NASA and NSBRI have been working on a new approach, called an Adaptability Training System (ATS), that they hope will help astronauts overcome these problems more quickly. A treadmill is mounted on a moveable platform in front of a large projection screen showing images of streets or hallways or a room. As the person walks, the image moves—along with the platform, simulating balance disturbances. Though developed for astronauts, researchers say the system could have enormous benefit for seniors and those with balance issues. Up to 40% of nursing home admissions can be attributed to falls. “There are definitely applications in the clinical world in terms of fall prevention with the elderly population,” says Dr. Helen Cohen, co-investigator on the ATS project.

Benchmark Listserv - Are You Signed Up?

Are you signed up for MAHC’s Benchmark Listserv? If not, do so today. What a great resource to network, share ideas, ask questions and communicate with your colleagues. To sign up, simply click here or go to MAHC’s website www.homecaremissouri.org.

MAHC is here to help you. Please contact us if you have any questions or need additional information related to any of our Benchmarking Projects.

Astronaut Training Could Help Prevent Falls Among Seniors

The 2nd quarter Falls Reduction Participant conference call was held on May 25, 2011. An overview of the report was given by special guest Bob Orballs, Health Data Analyst with the Hospital Industry Data Institute. Participants were also given the opportunity to ask questions regarding the quarterly reports.

An update on the Falls Validation Project was given (see details on page 1).

Carol Hudspeth, MAHC Project Manager, gave an overview of the Falls survey that was sent out to participants in February. Responses on data utilization, observations of fallers and best practices implemented were presented. Also discussed, based on survey responses, was if participants would like additional data collected on their fallers. Those on the call indicated that the data being collected now was sufficient and that MAHC should not make any changes to the project at this time. Carol indicated that she would be sending out a summary of all survey results to project participants.

Carol also reported that MAHC did not receive enough responses to develop a Falls Best Practices Teleconference, therefore, MAHC will propose that it’s Education Committee address Falls education. Carol thanked everyone for their time and reminded participants that they should feel free to call or email anytime with questions or concerns they may have.

Quick Facts...

- One third of Americans aged 65+ fall each year
- Every 17 seconds, an older adult is treated in the emergency room for a fall
- Every 29 minutes, an older adult dies following a fall
- The financial toll for older adult falls is expected to increase as the population ages and may reach $54.9 billion by 2020
Improve Your Balance in 10 Minutes a Day

Here is a great tool for your patients to improve balance. [Click here](#) to download this information in a patient handout format.

*(From the AGS Foundation for Health in Aging)*

**Four Square**

An important part of the balance system you use every day is your ability to know where certain body parts are in space. Your “internal sense of spatial orientation” is helped by this exercise.

1. Get on all fours with knees and hands 12 inches apart.
2. Keep your back flat and your head “straight.”
3. Lift each arm forward by itself and hold for 5 to 10 seconds.
4. Repeat with each leg, straightening it behind you but keeping it close to the ground.
5. Lift the opposite arm and leg (right arm, left leg) at the same time and hold for 10 seconds. Then repeat on the opposite side.

**Posture Perfect**

Posture and strength are important components of your body’s system of maintaining balance. These exercises encourage good posture while enhancing lower extremity strength as well.

1. Stand with your arms resting comfortably with a countertop or sturdy table in front of you and a wall behind you.
2. Stand with your feet comfortably apart. Look straight ahead, keep your back straight and your knees slightly bent.
3. Slowly rise up on your toes.
4. Lower yourself down slowly and repeat 5 times.
5. Keep your posture the same, but this time raise the front part of your foot, lower it slowly, and repeat 5 times.
6. Finally, keep standing as you have been. Lift one leg several inches off the floor and hold for 5 seconds, lower it slowly, and repeat 5 times. Repeat on the opposite foot.

**The Eyes Have It**

Good balance requires input from the environment to give your body the correct signals. Your eyes tell your body a great deal about the space in which you need to move and balance.

1. Sit in a stable chair with a straight back and arm rests if you need them to get up from a sitting position.
2. Focus your eyes on a target 10 to 20 feet away while you stand up slowly and then sit down again with your eyes open.
3. Repeat with your eyes closed.
4. Repeat 5 times.

“We do not stop exercising because we grow old - we grow old because we stop exercising.”

Dr. Kenneth Cooper, Cooper Institute.
An elderly person’s fear of falling can actually exacerbate underlying physical conditions, creating a “vicious circle,” which could lead to a greater risk of falling, according to a new report. Gait disturbances, or difficulty walking as a result of old age, often have many causes, according to the researchers from the Neurological Hospital and Health Center of the Ludwig Maximilians University in Germany. These can include visual defects, neurodegeneration of the motor cortex, taking medication or drinking alcohol, and anxiety over falls. Those elderly individuals who are afraid of falling typically restrict their own movements, inadvertently worsening the physical conditions they may have, and contributing to a greater risk of falls. The prevalence of anxiety-related gait disturbances in elderly patients could be as high as 85% according to the report. When treating the elderly for gait disturbances of any kind, it is important to correctly identify the underlying cause of the disturbance and tailor any therapies to that cause, researchers say. Their paper, “Gait Disturbances in Old Age: Classification, Diagnosis, and Treatment from a Neurological Perspective,” outlines diagnostic and treatment techniques.

They may never have the skills of Bruce Lee, but seniors with osteoporosis can use martial arts training to learn to fall more safely, researchers say. Using younger, more resilient test subjects, researchers from the Sint Maartenskliniek in Nijmegen, the Netherlands, tested the force of impact of a variety of different martial arts fall exercises. Subjects performed sideways and forward martial arts falls, which involve turning the fall into a rolling action, from a kneeling position on both a judo mat and a mattress, as well as from a standing position on a mattress, according to the report. The force of impact on the subject’s hip was measured and compared to information on how much force an osteoporosis sufferer can withstand. While most of the falls exercises would involve too great an impact for seniors with osteoporosis, researchers found ways they could safely perform the exercises. Seniors should wear protective hip padding, perform falls on a thick mattress, and avoid falling forward from a standing position.