

Falls

by

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Falls bedevil the lives of older adults, for they are common, have many possible causes, and can have life-altering consequences. The specter of falling is present so much in the minds of some older adults that there is a research area focused on “fear of falling” and its contributors. At the same time, the major risk factors for falls are well established and many risks are modifiable. For these reasons, our Virginia Geriatric Education Center (VGEC) has been working to develop an evidence based curriculum to train health care practitioners to better understand, assess, and prevent falls among older adults.

The VGEC is a consortium of three institutions of higher education, Virginia Commonwealth University, the University of Virginia, and the Eastern Virginia Medical School, which are partnering to increase geriatrics training for current health care providers and students and to institute more lasting changes in the professional training of providers through programs of faculty development and curriculum modification. The enterprise is inter-professional, engaging faculty from these three institutions and, within them, from medicine, pharmacy, nursing, social work, and physical therapy. Falls is the first target in what will eventually become a broad, multi-focused 160-hour curriculum that is grounded in establishing knowledge- and skills-competencies.

So, what is considered a fall? Surprisingly, there are numerous definitions used and misused in health care. Our VGEC adopted an existing one: “A fall is an unplanned descent to the floor (or an extension of the floor) with or without injury to the patient.” This definition precludes stumbles where one catches oneself or a dizziness that motivates one to sit down; either of these may be a precursor to a fall, but descent to the floor is our criterion. Furthermore, our strategy will be to prevent the recurrence of falls among those who have already experienced a fall. To accomplish this best, there should be inter-professional interventions.

Falls are common, affecting about one third of community-dwelling adults over age 65 and about half over age 80. In hospitals and nursing home settings, where older adults are likely more frail, confused, or have multiple problems, the numbers are higher; some 40% fall repeatedly. Falls have serious consequences, what is termed morbidity in the health care literature. They may be a signal of functional decline and do predict nursing home placement. More serious still, falls account for about two-thirds of accidents among older adults, and accidents are a leading cause of death. When fear of falling emerges as an issue for some elders, they are likely to reduce their activities, thinking that this will reduce their risk, and isolation and depression can ensue.

There are multiple risk factors for falling. Some are considered “intrinsic” or within the person; others are considered “extrinsic” or within the environment. Common intrinsic risk factors may include physical weakness, especially in the legs and feet; gait and

balance problems; difficulties with vision; urinary incontinence; depression; dizziness, perhaps from a vestibular (inner ear) condition or orthostatic hypotension (low blood pressure when rising). One can see just from this sampling of risk factors that there are teaching roles for nurses, physicians, and physical therapists in sharing with other professions how to assess gait, vision, or dizziness. For a number of intrinsic risk factors, once properly assessed, may be modifiable. Interventions may include strength and balance training, cognitive and dementia screening, assistive devices, and exercises before arising. Others, such as age above 80 or female sex, are non-modifiable risk factors.

Extrinsic risk factors for falling include environmental hazards inside and outside the home, such as carpeting, broken sidewalks, and faulty bathroom design; also, a regimen of multiple medications (sometimes called polymedicine or polypharmacy) taken because of several concurrent conditions, like high blood pressure, emphysema, arthritis, and diabetes, or inappropriate medications may be considered extrinsic, for the presence of the medications is due to actions by providers. Again, one can see teaching roles here for medical social workers and pharmacists to share expertise with other professionals. Many extrinsic risk factors are modifiable, such as through changes in lighting, railings, and furniture or installation of grab bars and high toilet seats in the bathroom, or through changes in medications prescribed, in order to reduce adverse drug effects.

As can be seen, the risk factors for falling are complex. At the same time, falls may themselves be a signal for other troubling conditions and, moreover, can be exacerbated by circumstances all too common in later life, like transitions in where one lives and the piling on of more prescribers when one manifests additional health problems. Falls and falling are anything but a static issue.

Our VGEC is adapting the seminal work of Mary Tinetti and colleagues, who demonstrated effective intervention in risk for falling. We have embraced a team-building approach in our planning meetings, which are frequent and lengthy but which have produced significant inter-professional results. Our training curriculum features not only rationale and mechanics of multidisciplinary risk assessments but also inter-professional interventions that work. The team approach values integrated clinical care, the division of labor around common goals, shared responsibility, open communication, re-evaluations, and an outcomes orientation. We believe that the complexity of the problem of falls requires the different skills of an inter-professional team. We are launching the first of our evidence-based training programs in May, 24 content hours, with both face-to-face sessions and learner-directed use of a menu of resources that we have identified.