

Adverse Health Events in Hospitalized Patients with Dementia

- **Delirium.** Dementia is the leading risk factor for delirium. Patients with dementia are three to five times more likely than other older adult patients to develop delirium in the hospital, ¹⁻⁴ and two-thirds of delirium in hospitals occurs in patients with dementia.⁵
- Falls. Hospital patients with dementia are 1.6 to 3.6 times more likely than other older patients to fall in the hospital.^{6,7} One-third to nearly two-thirds of falls in older patients involve a patient with impaired memory, which is indicative of dementia.^{6,8}
- New incontinence. Hospital patients with dementia are more likely than other older patients to develop new incontinence. A study of 13,729 older patients in 81 hospitals in Italy found that those with dementia were five times more likely to develop new urinary incontinence and six times more likely to develop fecal incontinence.
- **Indwelling urinary catheters.** Hospital patients with dementia are at greater risk than other older patients for placement of an indwelling urinary catheter without a specific clinical indication. In one hospital, patients with dementia were almost three times more likely than other older patients to have such a catheter placement.
- **Pressure ulcers.** The study of more than 13,000 older patients in 81 Italian hospitals, mentioned above, also found that patients with dementia were five times more likely than other older patients to develop new pressure sores.⁷
- **Untreated pain:** Hospital patients with dementia are more likely than other older patients to have untreated pain. For example, two studies found that hip fracture patients with dementia received roughly one-quarter to two-fifths of the amounts of opioid analgesics received by other older hip fracture patients. 10, 11
- Agitation and related behavioral symptoms. Behavioral symptoms such as agitation, repetitive verbalizations, yelling, and physical aggression are common in people with dementia, and many aspects of hospitalization can exacerbate these symptoms. 12-14 In one community hospital, 95% of the patients with dementia were found to have at least one agitated behavior, and the number and frequency of these behaviors were strongly associated with nurses' reported levels of burden. 15
- **Physical restraints.** Hospital patients with dementia are three to six times more likely than other older patients to be physically restrained. ^{16, 17} One study of hip fracture patients found that 32% of those with severe dementia were physically restrained, compared with only 2% of those with no dementia. ¹¹
- Functional decline. Hospital patients with dementia are more likely than other older patients to experience functional decline during hospitalization. Studies of large samples of older hospitalized patients show that those with dementia were two to four times more likely than other older patients to lose the ability to perform activities of daily living during a hospital stay. 18, 19
- New feeding tubes. Hospital patients with dementia are more likely than other hospitalized patients to have new
 feeding tubes inserted during hospitalization. One study of patients dying in an acute care hospital found that
 those with dementia were more than twice as likely as those with cancer to receive new feeding tubes.²⁰— Katie
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