# RESIDENT AND FACILITY FACTORS ASSOCIATED WITH HIGH RISK OF DISCHARGE FROM NURSING FACILITIES, 2012-2017

## KEY POINTS

- Residents with severe behavioral symptoms, impairments requiring more staff time, transitioning to Medicaid eligibility, and with recent diagnoses of psychiatric and mood disorders were at higher risk of being discharged from nursing facilities.
- Residents with these risk factors were more likely to be discharged from for-profit, government, and chain facilities than non-profit and non-chain facilities.
- Rates of hospitalizations, emergency department visits, and observation stays were higher among discharged residents with risk factors than residents without risk factors.

## BACKGROUND

People can be discharged from nursing homes for many reasons. Discharges may be a positive outcome that reflects an individual's choice. In other cases, discharges may be at the direction of the facility and against the will of the resident. There are strict rules about when involuntary facility-initiated discharges (FIDs) are allowed. FIDs may be unsafe and traumatic for the residents involved and may result in higher costs of care, raising concerns to the public and to Medicare and Medicaid programs. Prior to the COVID-19 pandemic, news media and Ombudsman programs reported that FIDs were becoming the leading cause of complaints for nursing home residents. This study identifies resident characteristics related to increased risk of discharges and how these relationships vary across time, states, and facility types. It also presents findings on the relationship between discharges of residents with risk factors and post-discharge outcomes.

## METHODS

This study focused on live discharges of nursing facility residents with characteristics that were found to be indicative of FIDs. Because the available data does not identify whether the discharge of a resident was initiated by the facility (i.e., a FID), the research team first conducted a literature review to identify factors likely associated with FIDs. This project then used quantitative analyses to assess literature-identified factors and to explore additional factors associated with a higher risk of discharges. We refer to both collectively as "risk factors for discharges". See Section 2.3 Statistical Analyses, Identifying Risk Factors of the final report for a complete list of all FID risk factors.

We compared the prevalence of resident characteristics between residents discharged and those not discharged to identify risk factors and further compared risk factors across years, states, and facility types, using the Minimum Data Set resident assessments linked with Medicare enrollment data and claims from the Master Beneficiary Summary File. Data from calendar years 2012-2017 were used in this analysis. We primarily studied nursing facility residents as there were no identifiable risk factors among skilled nursing facility residents.

Resident characteristics were considered risk factors if they were conditions customarily required to be treated in a nursing home and were found in our research to be more prevalent among residents discharged live than residents not discharged. Next, we investigated risk factors among nursing facility residents further by analyzing their prevalence across years, states and facility types. Lastly, we compared post-discharge outcomes, primarily hospitalizations and outpatient acute care visits, of nursing facility residents discharged live with and without risk factors.

## RESULTS

Of the nursing facility population in 2017, 16.6% of residents were discharged at some point during the year. The percent of residents discharged was stable over time, and the same risk factors were observed across years.

### Risk Factors for Discharges among Nursing Facility Residents

Behavioral symptoms, impairments requiring more staff time, and transitions to Medicaid eligibility were found to be more prevalent in residents discharged than those not discharged. However, impairments were only more prevalent among residents discharged when increasing in severity. These risk factors were also identified in the literature as risk factors for FIDs. New diagnoses of psychiatric and mood disorders (e.g., schizophrenia and manic depression) were not previously identified in the literature, but were also more prevalent in residents discharged than those not discharged. The same risk factors for discharge were identified across years.

### Risk Factors for Discharges by State

We found large variation in risk factors for live discharge across states, with geographic clusters in presence or absence of risk factors varying by the risk factor examined. For example, severe physical behavior at the end of stay places residents at a higher risk of discharge nationally and in 30 states, with a concentration in the southern states; however, in 20 states and the District of Columbia, severe physical behavior at end of stay places residents at lower risk of discharge. Another example is the differences in the prevalence of new diagnoses of anxiety, which were positive in all but four states. Anxiety at end of stay had positive difference in prevalence in 13 states.

### Risk Factors for Discharges by Facility Type

We also found that the differences in the prevalence of risk factors between residents discharged and those not discharged varied by facility type. Compared to nonprofit facilities, for-profit and government facilities had a higher prevalence of risk factors among residents discharged, relative to residents remaining in the facility. Likewise, rural facilities and facilities that were part of a chain had a higher relative prevalence of risk factors among residents discharged than urban and non-chain facilities, respectively. Lastly, residents discharged from terminated facilities had lower prevalence of risk factors than residents discharged from active facilities.

### Post-discharge Outcomes for Nursing Facility Residents

We observed high rates of acute care use, defined as hospitalizations, emergency department visits and observation stays, and mortality among residents discharged from nursing facilities. Overall, 53% of all residents discharged experienced acute care, and 36% of all residents died within 30 days of nursing facility discharge. However, rates of acute care were higher among residents discharged with risk factors for discharge than residents discharged without these risk factors. Furthermore, we found the majority of residents discharged went directly from the nursing facility to the hospital or emergency department, with a smaller percentage of them going briefly to the community or another non-acute care setting before using acute care.

## DISCUSSION AND CONCLUSION

This study identified several resident characteristics associated with a higher risk of discharges from nursing facilities, including behavioral symptoms, impairments requiring more staff time, transitions to Medicaid eligibility, and psychiatric and mood disorders, especially when these conditions newly developed or worsened in the past year.. However, for many of these risk factors, the prevalence and strength varied across states and facility types. For profit, government and chain facilities were more likely to discharge residents with risk factors than non-profit and non-chain facilities. We also found that residents discharged with these risk factors, particularly severe behavior symptoms and impairments requiring more staff time, experienced higher rates of acute care (hospitalizations, emergency department visits, and observational stays) than residents discharged without these risk factors.

Although the discharges of residents with the risk factors identified in this research may be legal, our goal was to identify patterns in discharges to gain insight into the prevalence of FIDs. These findings are intended to serve as a foundation for continued discussion and analyses and to inform strategies and policies for reducing potentially inappropriate FIDs. Further research would be needed to discern unlawful FIDs from legal discharges. Additional recommendations for future research include examining the discharge locations of residents and better understand residents' outcomes post-discharge, and the impact of state policies, facility closures, and the COVID-19 pandemic on FIDs.

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