



Research Brief

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EMERGENCY DEPARTMENT USE AMONG ASSISTED LIVING RESIDENTS AFTER HURRICANE IRMA

Keywords: disaster preparedness, assisted living, long-term care, emergency department

Purpose of the Study: To evaluate the impact of Hurricane Irma on emergency department use among Florida assisted living residents, and to examine the primary reasons for these visits

Key Findings:

- ✓ Emergency department use increased significantly among Florida assisted living residents after Hurricane Irma in 2017 compared to 2016, the nearest year without a serious disaster.
- ✓ Heart failure was a primary diagnosis of emergency department visits after Hurricane Irma in 2017, but not in 2016.

Major Policy/Practice Implication: Assisted living residents are a large, vulnerable population that may be at particular risk during disasters, given they have relatively high levels of impairment but may have limited disaster support at policy and community levels.

IMPORTANT BACKGROUND INFORMATION

Community-dwelling older adults visit emergency departments (EDs) more frequently after disasters, but less is known about ED use among assisted living (AL) residents. AL communities do not provide in-house skilled nursing, so AL residents rely on community-based healthcare similar to community-dwelling older adults. Even more, some research suggests reasons for ED visits among community-dwelling older adults include injuries, such as falls, due to hazardous conditions, and exacerbated chronic conditions due to disruptions in regular medical care, such as difficulty refilling prescriptions. It is unknown if AL residents have similar patterns of ED use.

STUDY METHODS

The study included all Florida AL residents in 2017 with few exceptions. Data were compiled from several sources to identify demographic information, chronic conditions, ED use, and AL residency. Researchers used validated algorithms to determine AL residency, and to classify ED use as “injury-related” or “other medical.” Emergency department visit rates were calculated at 30- and 90-days after Irma, expressed per 1,000 person days, adjusted for demographic characteristics, pre-existing chronic conditions, and AL community characteristics, and contrasted to 2016 rates. Finally, researchers examined the top 10 diagnostic codes of ED visits in 2016 and 2017.

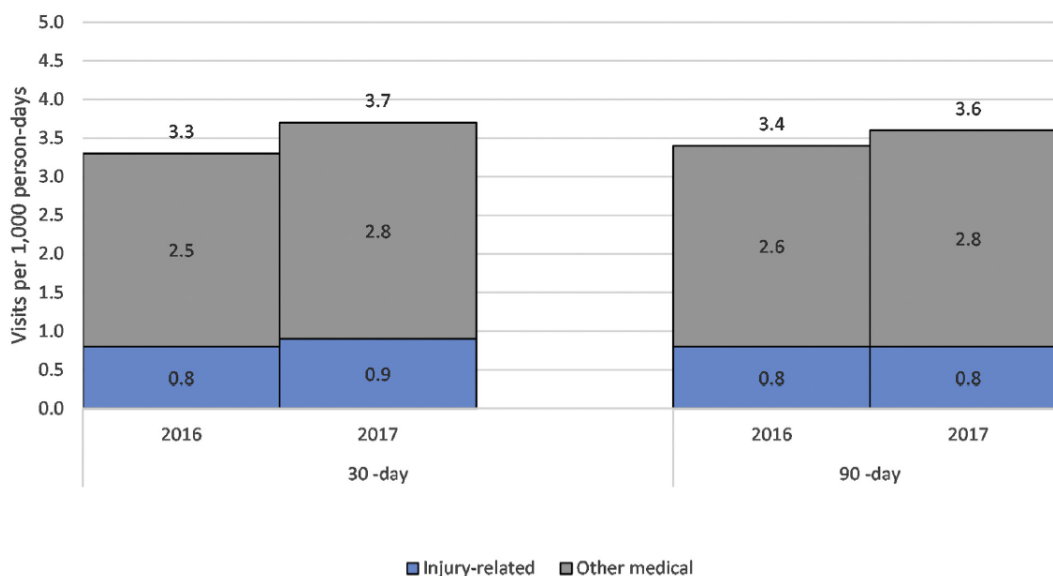
KEY FINDINGS

- ✓ **Rates of ED use among AL residents were significantly higher after Hurricane Irma in 2017 than in 2016:**
 - Injury-related visits were 12.5% higher at 30 days, but there was no significant difference between injury-related rates at 90 days.
 - Other medical visits were 12% higher at 30 days, and 7.7% higher at 90 days.
- ✓ **Heart failure was a primary ED diagnosis among AL residents after Hurricane Irma in 2017, but not in 2016:** The top ten ED diagnoses were similar from 2016 to 2017 (e.g., UTI, sepsis, etc.), with the exception of heart-failure related diagnoses, which were in the top ten only in 2017.

PRACTICE AND POLICY IMPLICATIONS

Policymakers, AL communities, and community health providers should pay more attention to AL residents after disasters. Specifically, providers should prioritize a return to normalcy as soon as possible to minimize injury and stress-related morbidities, and policymakers should ensure existing mandates support AL communities with limited resources.

Even more, this study supports previous research that non-injury related ED visits among older adults after disasters may be related to exacerbated chronic health conditions, such as heart failure, and/or discontinuities in care, though additional research is needed. Stakeholders should collaborate on innovative solutions to ensure continuity of care after disasters, which could minimize preventable morbidities.



ORIGINAL ARTICLE

Hua, C.L., Thomas, K.S., Peterson, L.J., Hyer, k., & Dosa, D.M. (2020). Emergency Department Use Among Assisted Living Residents after Hurricane Irma. *The Journal of Post-acute and Long-term Care Medicine*, 22(4), 918-922. doi: 10.1016/j.jamda.2020.10.010

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