HELPING NURSING HOMES SHELTER-IN-PLACE

To the editor:

We read with interest the review by Baxter comparing nursing home evacuation versus sheltering-in-place for natural disasters. Baxter concludes that sheltering-in-place is often the safer option for nursing home residents and offers suggestions to help nursing homes shelter-in-place more effectively. Ours and one other recent review reached similar conclusions: though both evacuation and sheltering-in-place are associated with adverse health outcomes for nursing home residents (increased mortality, more hospitalization, and functional decline), the evidence-based literature suggests that sheltering-in-place is associated with better health outcomes compared to evacuation.

One of Baxter’s recommendations is to be aware that maintaining power is key to successful sheltering-in-place. A recent survey of nursing homes affected by Hurricane Sandy noted that more than 70 percent of facilities lost electricity. Loss of power in a skilled nursing facility that chose to shelter-in-place for Hurricane Irma was associated with 14 resident deaths, tragically highlighting the vulnerability of nursing home residents to prolonged loss of power. Days after these events, Governor Rick Scott issued rules requiring all Florida nursing homes and assisted living facilities to have generators and fuel to control temperature for at least 96 hours after a power outage. This untested intervention has met with controversy, legal challenge and an estimated cost to Florida nursing homes of $230 million.

After Baxter submitted her manuscript, the Rhode Island Senior Resiliency Project published a description of interventions to help nursing homes more effectively prepare for sheltering-in-place. This included an intensive on-site energy resiliency audit with special attention to the emergency power supply system. The audit reviewed generator size, fuel capacity, maintenance and operational guidelines, and emergency servicing agreements with vendors. This detailed audit then resulted in the development of planning templates and staff training related to maintaining power in order to improve facility capacity to shelter-in-place. We applaud reporting of this specific, innovative intervention and encourage development and testing of other mitigation and preparedness efforts.

When faced with a natural disaster, sheltering-in-place may not always be the best option; therefore, nursing homes should also have detailed plans for evacuation. Three hospitals and an estimated 80 of Florida’s 700 nursing homes evacuated for Hurricane Irma. We agree with Baxter and others that the decision to shelter-in-place or evacuate is a complicated and challenging process, and depends on several factors. These include the nature of the hazard, timeliness of warning, structural aspects of the facility, resources available to the facility, and medical needs and acuity of the facility’s residents. Our review recommended that nursing homes make this decision in collaboration with their community’s emergency management officials and healthcare coalition. Based on evidence-based literature, our review also advised that nursing homes could more effectively respond to disasters if they proactively review with local emergency management, their emergency plans including the fundamental components for both evacuation and sheltering-in-place.

Nursing homes, which house some of our nation’s most vulnerable populations, often have limited experience and resources for disaster planning and response. We commend Baxter and the Rhode Island Senior Resiliency Project for disseminating interventions to assist nursing homes with enhancing their disaster response initiatives for sheltering-in-place. As have others, we urge more
research and collaboration to better understand what interventions improve outcomes for residents in long-term care facilities experiencing a disaster.\textsuperscript{2,3,9,11}

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REFERENCES