Emergency Preparedness in Nursing Homes and Agencies Providing In-Home Care:

What Have We Learned from Hurricane Katrina?

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Session Track 3:3.05

Profile of Older Americans I

- 37 million people age 65+ in U.S.; 72 million 2030
- 1 in 25 baby boomers will live to age 100
- 14 million older people living in community have a disability
- 8+ million receive in-home care
- 4+ million older people in long term care residence (nursing home, assisted living)

Profile of Older Americans II

- Older people are vulnerable to disasters:
  - Impaired physical mobility, chronic disease
  - Diminished vision and hearing
  - Impaired cognition and/or dementia
  - Limited economic resources; social isolation
  - Reluctant to report need for mental health services

Long-Term Care Continuum (Simplified)

Presentation Overview

- Disaster Preparedness in Nursing Homes in South Carolina, Immediately Before and After Hurricane Katrina
- Experiences of Gulf Coast Nursing Homes that Sheltered Hurricane Katrina Evacuees
- Disaster Preparedness in Agencies Providing In-Home Care, in South Carolina, 2006
- Summary of Recommendations, Next Steps

Nursing Home Preparedness in SC

The Augusta Chronicle / Andrew Davis Tucker via AP

Nursing Homes – Background I

- 2.5 million older Americans living in 18,000 nursing homes
- Few studies of nursing home preparedness
- Studies identify problems: transportation, communication, lack of supplies, staff shortages
- Findings show nursing homes receive much less support than hospitals, e.g., power restoration, access to transportation to evacuate residents

Nursing Homes – Background II

- Joint Commission (JC) requires emergency plans
- Only 7% of nursing homes are JC-accredited
- Centers for Medicare and Medicaid Services (CMS) delegates preparedness to states
- State preparedness oversight focuses on checklists, plan documentation, review with staff and drills, **without** providing feedback from public officials or risk managers

Nursing Home Preparedness in SC

- Designed & mailed baseline survey after talking with emergency management public officials & nursing home administrators, reviewing guidelines
- Baseline survey mailed to licensed SC nursing homes (N=192), July 2005
- Post-Katrina survey to all nursing homes, mid-September

For more information: Laditka, S.B., J.N. Laditka, S. Xirasagar, C.B. Cornman, C.B. Davis, and J.V.E. Richter (2007). "Protecting Nursing Home Residents During Disasters: An Exploratory Study from South Carolina." *Prehospital and Disaster Medicine*, *22*(1), 42-48.

Methods & Response Rates

- Quantitative data: standard descriptive statistics, t-test, chi-square statistics, Pearson correlation coefficients
- Qualitative data: coded independently by 3 researchers using grounded theory
- 112 baseline surveys; 50 post-Katrina surveys (response rate: 58.3%; 25%)

Respondent Characteristics

- 90% administrators
- 60% worked in facility > 5 years
- Average 15 years nursing home administrative experience
- < 20% metropolitan
- 14% “coastal”

Satisfaction with Preparedness

1. 82% satisfied with ability to shelter own residents
2. 68% satisfied with ability to shelter evacuated residents
3. 59% satisfied with transportation
4. 55% satisfied with off-duty staff ability to report to work to care for evacuees
5. 93% satisfied with “overall” preparedness
6. Overall satisfaction (5) only modestly correlated with 1-4 (*r* range=.25-.33)

Communications Arrangements

- Asked: “all communications methods you plan to use …”
- > 80% would rely on cell phones, computers, and/or “walkie-talkies” if landline phone service were disrupted
- Only 5 mentioned Ham radios

Post-Katrina Q., Changed How You Think about Preparedness? If So, How?

- Katrina changed views (54%):
  - Rethinking evacuation/transportation (32%)
  - Updating plans (30%)
  - Rethinking supplies (14%)
  - Rethinking staff (12%)
- Katrina did not change views (36%):
  - Feel well prepared (30%)
  - SC better prepared because of hurricanes (6%)
  - “It can’t happen in South Carolina”

Lessons Learned

- Nursing homes are compliant
- Not necessarily prepared
- Few redundant communication systems
- Many did not recognize transportation problems, need for back up
- Little integration with local emergency management system

Study of Nursing Homes that Sheltered Hurricane Katrina Evacuees

Study of Nursing Homes that Sheltered Hurricane Katrina Evacuees

- We partnered with gulf coast nursing homes sheltering Katrina nursing home evacuees
- Within several weeks after Katrina
- Goal: To identify lessons learned

For more information: Laditka, S.B., J.N. Laditka, S. Xirasagar, C.B. Cornman, C.B. Davis, and J.V.E. Richter (2008). "Providing Shelter to Nursing Home Evacuees in Disasters: Lessons from Hurricane Katrina." *American Journal of Public Health*, e-pub ahead of print, 1/2/08.

Katrina Study: Goal and Objectives

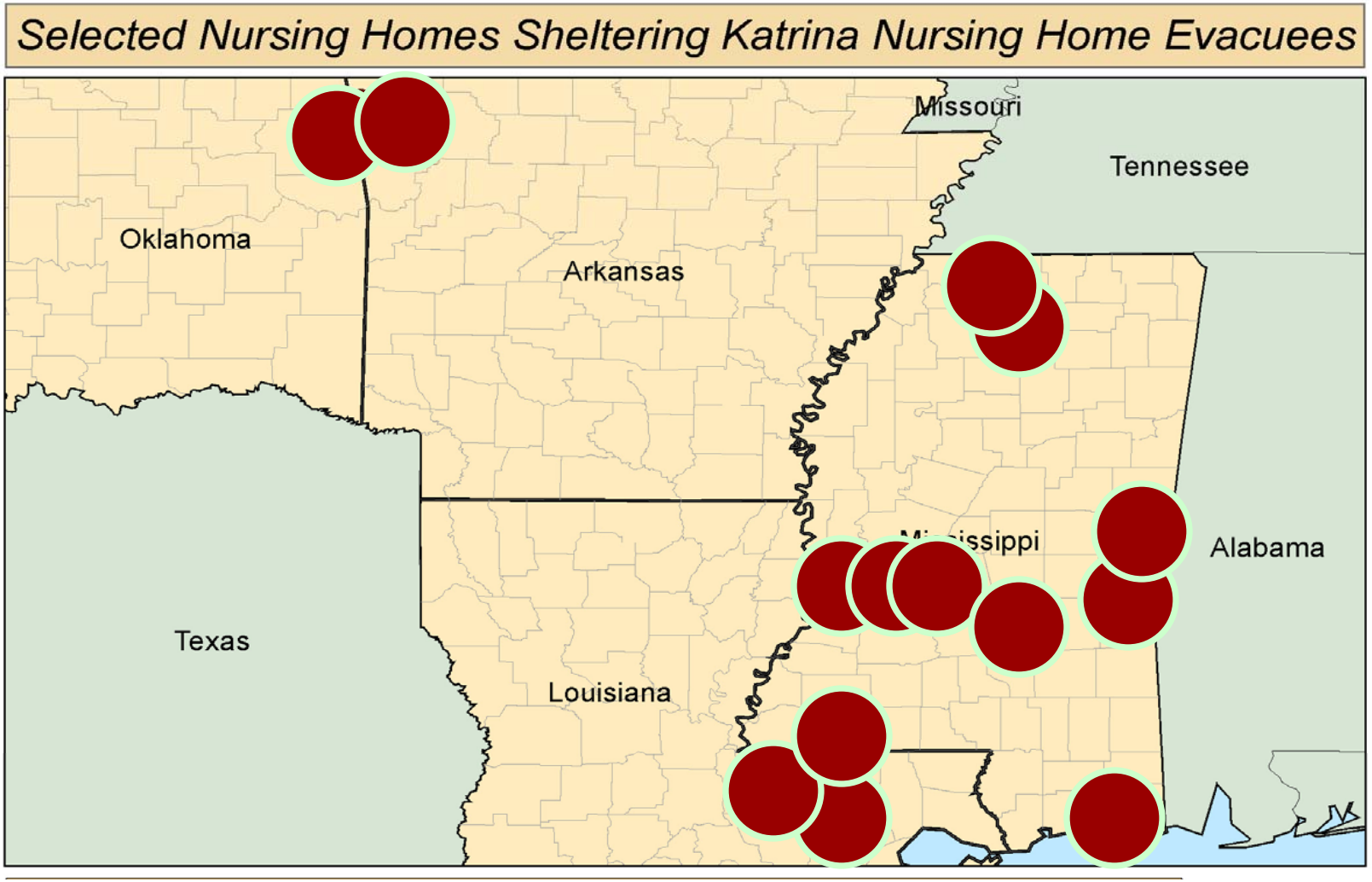
Focus on:

- Administrators and staff, **not** residents.
- Nursing homes that were **not** destroyed.

Katrina Study: Design & Methods

- Phone interviews early October 2005
  - 14 nursing homes sheltering 458 Katrina evacuees
- Visited 4 nursing homes early November 2005
- Conducted follow-up phone interviews (n=14) late January 2006
- Analyzed data using descriptive and qualitative methods (grounded theory)

Map of Gulf Coast Partners



Phone Interviews, October 2005

- Most nursing homes notified in advance
- Most had supplies in place; more needed
- All called in extra staff before Katrina
- Received little assistance from other agencies
- Major problems: lack of gas, lack of supplies, heat, communication with families
- Used innovative strategies

Site Visits, November 2005

- 4 administrators, 38 care and support staff
- Rural and urban
- Major problems: mental health needs, heat, lack of gas, water, personal hygiene supplies, medical and care information about evacuees
- Staff emphasized importance of making evacuees feel comfortable and welcome; teamwork; receiving support and resources from community; practicing drills regularly

Phone Interviews, January 2006

- 80% still sheltering Katrina evacuees
- Many evacuees and staff had long term mental health concerns
- Evacuated residents' families still relocating
- Dept. Mental Health helping evacuees & staff
- 60% modified, or were in process of / thinking about modifying preparedness plans
- Few changes to plans were made

Systems Lessons

- Address specific types of disasters in plans, such as hurricanes or earthquakes
- Make arrangements with local authorities to allocate gasoline for staff commutes
- Establish close working relationships with emergency management system and community leaders

Staff & Resident Lessons

- Cross-train personnel to serve as certified nursing aides, so they can assist with resident care during an emergency
- Prepare staff and residents for disasters
- Develop plan to accept evacuees
- Ensure that care plans & medications accompany evacuees
- Strong team work is essential

Supply, Power, Communication, Transportation Lessons

- Keep at least 7-days of supplies
- Put generator outlets in the kitchen
- Hook up washer/dryer to a generator
- Use walkie-talkies in facility
- Establish redundant communications
- Establish back up transportation

Our Personal Reflections

- Administrators and staff were resilient:
  - Administrators and staff said the disaster gave them opportunity to bond with residents, evacuees, staff
    - “we turned a disaster into a blessing”
    - “was a life changing event”
- Administrators were grateful for the opportunity to share their stories; many said **we were the only people interested**

Context for Our Recommendations

- Most Gulf Coast partners and nursing home administrators in South Carolina emphasized this point
- Nursing homes need to enhance preparedness, tap established preparedness networks

“We are on our own!”

Recommendations

Nursing homes would benefit by:

- **Working with local preparedness system to tap into Ham radio operators. Hams use low tech, portable equipment to establish communication when landline systems are disrupted**
- **Developing stronger linkages with local preparedness system**

In-Home Care Agencies in South Carolina

In-Home Care Agencies in SC: Study Objectives

- Explore how personal care and home health agencies help older clients prepare for disasters

  Personal care agencies: part-time help with activities of daily living, instrumental activities of daily living (Medicaid)

  Home health agencies: short-term skilled care (Medicare)

- Examine agency preparedness
- Describe regulations
- Identify how agencies can enhance preparedness

Laditka, S.B. J.N. Laditka, C.B. Cornman, C.B. Davis, and M.J. Chandlee. "Disaster Preparedness for Vulnerable Persons Receiving In-Home Long-Term Care in South Carolina." *Prehospital and Disaster Medicine* (In Press).

In Home Care Agencies - Methods

- Reviewed regulations in S.C. and U.S.
- Interviewed 9 emergency management officials
- Conducted in-depth telephone interviews, administrators of personal care agencies (n=16), home health agencies (n=5)
- Analyzed interview data, qualitative methods
- Categorized personal care agencies as: less prepared, moderately prepared, or more prepared

Regulation Findings

Personal care agencies

- No federal preparedness regulations
- SC regulations require case managers of Medicaid home and community based waiver (MHCBW) to develop plan

Home health agencies

- CMS requires plan, no detailed guidance
- Joint Commission requires all-hazards approach, 1 drill per year, effective 2008
- SC Dept. of Health and Environmental Control requires preparedness plan

Agency Characteristics

- Personal care agencies (PCAs) (N=16)
  - 2,147 clients served
  - 8 rural, 5 coastal, 3 urban
- Home health agencies (HHAs) (N=5)
  - 2,180 clients
  - 2 rural, 3 coastal

Regulations require HHAs to have plan; all said they had one. Thus, we used our resources to interview PCAs, fewer HHAs.

Personal Care Agency Results

- 6 PCAs were less prepared; 7 moderately
- For these 13 agencies, there was a lack of preparedness to:
  (1) Identify high risk clients, assist with planning
  (2) Provide written materials, recommendations
  (3) Protect records
  (4) Educate staff and clients
  (5) Coordinate planning & response across agencies

PCA Results, Responses to Selected Questions and Selected Quotes

- Q: Describe general disaster plan, plans to care for clients during and after a disaster

- Less prepared agencies: had no plans, or minimal plans; said it was not their responsibility to help clients prepare, because they were only in clients' homes briefly

  "This is up to family members; we only provide meal preparation and bathing."

PCA Results, Responses to Selected Questions and Selected Quotes

- Q: Describe process to determine high risk clients, special provisions to care for high risk clients.
- Less prepared agencies: no provisions to care for high risk clients, or relied on assistance of families.

  “Most of our clients depend on family members.”

- Moderately prepared agencies: described processes that relied on others, primarily case managers in MHCBW program.

PCA Results, Responses to Selected Questions and Selected Quotes

- Q: Describe processes to develop disaster plans for clients, recommendations provided to clients.
- Less prepared agencies: no process to develop plans; did not provide materials/recommendations, or did not provide routinely.
- Moderately prepared agencies helped develop plans.

“At admission, and at 30-60 days, we review the plan, go through their house, and look at safety items, smoke alarms, stairs, and windows. We ask, ‘what would you do if this occurred?’”

PCA Results, Responses to Selected Questions and Selected Quotes

- Q: Describe your plans to coordinate with other agencies.
- Less prepared: no plan or only a basic one to coordinate with other agencies.

  “We don’t have a plan except that at time of emergency; we contact local police and fire departments.”

- Moderately and more prepared agencies described more specific plans to coordinate.

PCA Results, Responses to Selected Questions and Selected Quotes

- Q. Provide suggestions to improve preparedness.

"Education in some homes is non-existent. Everybody needs to be more informed and have a proactive voice. We need more set standards in community … and then can pass along to clients."

"We need formal policies and procedures with a command center … Staff need to know their roles."

"We need to work real close with the county-wide emergency preparedness system."

Home Health Agency Responses, Q. How to Improve Preparedness

- Most were unsure how well plans would work in disaster, given lack of training; emphasized need for better coordination and training

“We just need better coordination, need to meet to try to identify roles; staff changes in between the time of a meeting and a disaster; some information is not familiar and does not get passed on.”

“No matter how much you plan, the plan is never good enough. We are about the business of providing home care to the patient not about the business of providing emergency planning.”

In-Home Care - Recommendations

- Build stronger linkages with local emergency preparedness systems
- Incorporate planning in certification requirements
- Develop more educational resources
- Improving preparedness would require more financial resources from states

Summary of Recommendations

- Nursing homes and in-home agencies have opportunity to build stronger linkages with local preparedness systems – long term care is “out of the loop”
- Educational resources for administrators and staff could be provided by nursing home and in-home care professional organizations
- Disaster planning could be incorporated into education and training programs for long-term care health professionals

Next Steps?

- Examine disaster preparedness in other long-term care residences, e.g., assisted living
- Develop integrated theory of long-term care preparedness, with goal of reducing post-disaster morbidity and mortality.

Long-term Care: the Missing Piece of the Preparedness Puzzle

Thanks to Our Preparedness Team!

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