Dallas Mega Shelter Onsite Medical Operations
Supporting Evacuee Functional Independence and Family
Unit Integrity During Response to Hurricane Harvey
Prof. Raymond E. Swienton, Dr. Kelly R. Klein,
Dr. E. Liang Liu, Dr. Lindsay A. Flax, Prof. Raymond L. Fowler
University of Texas Southwestern, Dallas, United States

Introduction: In the United States, over 50% of people have at
least one chronic medical condition, access, or functional li-
mitation. In 2017 during Hurricane Harvey, the establishment of a
comprehensive multidisciplinary onsite medical clinic provided
health and medical services to over 3,800 evacuees at the Dallas
Mega Shelter, providing large-scale general population sheltering
support to all evacuees and prioritizing family unit integrity by
meeting physical, sensory, and cognitive limitations, and chronic
medical conditions. The effectiveness of the Dallas Mega Shelter
onsite medical operations supporting this aim is reviewed.

Aim: To utilize onsite health and medical resources to meet
access and functional needs of evacuees seeking general
population mass sheltering in Dallas, Texas during Hurricane
Harvey.

Methods: Observational.

Results: Over 3,800 evacuees were evaluated for functional
needs support services (FNSS) resulting in over 2,500 evacuee
patient encounters during 21 continuous days of onsite health
and medical clinic operations.1 A comprehensive array of ser-
vices were available at no cost to the evacuees and were in ac-
cordance with the Federal Emergency Management Association
(FEMA) published Guidance on Planning for Integration of
Functional Needs Support Service in General Population
Shelters.2 The goal to maintain nearly all evacuees choosing to
stay in the Mega Shelter was achieved. The challenges, limita-
tions, and risks identified are reviewed.

Discussion: FNSS guidelines require all persons, regardless
of limitations, when evacuated from home be provided all ser-
vices necessary to allow them to remain in general population
sheltering.2 This prioritization of personal choice, functional
independence, and family integrity for those with comprehen-
sive FNSS requirements presented notable challenges, including
public health and safety risks impacting the wellbeing
of others. Meeting these expectations must be balanced with
maintaining shelter integrity.

References
1. Liu, EL, Morshedi B, Miller BL, et al. Dallas mega shelter
medical operations response to Hurricane Harvey. DMHPB

Development of an Evacuation Exercise for Residential
Aged Care Facilities Using the Emergo Train System (ETS)
Mr. Karl Cronan, Ms. Linda Winn
NSW Ambulance, Eveleigh, Australia

Introduction: Events such as the Sydney Quakers Hill Nursing
Home fire highlighted the great need for robust evacuation
plans for Residential Aged Care Facilities (RACFs). However,
plans alone are not sufficient and routine exercises are necessary
to test the capability of a facility’s emergency plan. Current
methods of exercising facility evaucations, such as live drills, are
limited and only test isolated elements of the evacuation pro-
cess, which fall drastically short of being able to simulate the real-
time resources and procedures required to perform a large scale
evacuation of a RACF.

Aim: To develop an exercise tool that assists Residential Aged
Care Facilities (RACF) to evaluate their evacuation procedures
using quantifiable data, based on real-time and providing min-
imal disruption to existing residents.

Methods: Utilizing the existing ETS framework, an aged care
resident patient bank was developed by NSW Health Emergency
Management Unit, including:
• A bank of 200 residents from data sourced from the Australian
  Institute of Health and Welfare.
• Layout for the resident gubers and Summary Care Plans.
• Resources and equipment routinely used in RACF’s.
• Real-world testing of the prototype in exercises across NSW,
  Australia
• Mortality and morbidity data to measure outcomes.
• Validation of the exercise tool nationally and internationally.

Results: A bank of residents was developed to test evacuation
systems and processes, in a scalable, realistic simulation based
on patient outcomes. This will result in improved planning
and process, empowerment of RACFs, better patient outcomes,
and increased resilience and preparedness.

Discussion: A significant investment of data, time, and effort
has gone into producing this resident bank for use in RACF
evacuation exercises across NSW Australia. A presentation
delivered at the ETS World Congress in the Netherlands
(2018), by NSW Health Emergency Management Unit,