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Care of Older Adults in Rural Emergency Departments During the COVID-19 Pandemic

Asma Sabih, MD, Adam Perry, MD, Rebecca Weeks, MN, RN, Michael L. Malone, MD

One in five Medicare beneficiaries lives in rural America.[1] 42% of all emergency departments (EDs) occur in our country's rural counties.[2] 17% of our nation's ED visits are provided in these limited-resource settings.

We know older adults require significantly more ED resources and time, and America's rural population is characterized as older, sicker, poorer, and more medically vulnerable than counterparts in urban settings.[2,3] Faced with the dilemma of serving a higher-need population with fewer resources, rural EDs often "do more with less". This challenge is magnified by the COVID-19 pandemic, which disproportionately affects older adults and has at times overwhelmed even the most resourced health care environment. Thus, the COVID-19 pandemic illustrates how rural EDs must expand assessment, treatment and coordination capacities to help offset the newly diminished hospital, health system, and community senior resources. Rural clinicians and EDs can adapt to this evolving stressor through application of the five re-engineering system strategies discussed below.

This paper outlines the challenges presented by the unique needs of rural older adults during the COVID-19 pandemic. We will briefly describe the care of older adults in the rural ED, the care of older adults during the COVID-19 pandemic, and the emergency care of those older patients suspected of COVID-19. We will highlight the necessity of re-engineering rural ED processes to better meet the needs of vulnerable older adults.

WHAT'S SPECIAL ABOUT EMERGENCY CARE OF OLDER ADULTS IN RURAL SETTINGS?

Care of older adults in rural EDs requires self-reliance due to limited diagnostic, therapeutic, surge, and care coordination resources.[2] Further, rural EDs serve a high proportion of older adults with unique vulnerabilities wrought by distance, fragmented support networks, and limited access to or availability of primary and specialty care.[4] In this environment, older adults often present with greater illness acuity from delayed care. Fear of accessing medical care during the pandemic and lack of access to telehealth are additional barriers to primary and emergent care contributing to delayed presentation in rural environments.

ED clinicians in rural setting have a broad scope of practice due to limited timely access to specialty, ancillary (case management, PT/OT, social work), and nursing resources. Rural clinicians caring for complex older adults perform all parts of a comprehensive rapid examination themselves. They alone must evaluate

for cognitive and functional impairment, atypical presentations of disease, adverse medication events, caregiving environment, and unmet palliative care needs. Further, rural clinicians are often responsible for transition of care communication with nursing homes or home health, as well as coordination with community resources such as the Office of Aging and community paramedicine. Electronic health record templates for "geriatric assessment" and Siebens' "Domain Management Model" can be used to expedite both the performance and communication of this broad ED assessment.[5]

WHAT ARE THE KEY POINTS TO THE EMERGENCY CARE OF OLDER ADULTS DURING THE COVID-19 PANDEMIC?

With the COVID-19 pandemic, rural EDs must expand assessment, treatment, and coordination capacities in an era of diminished hospital, health system, and community senior resources.[4] This evolution occurs alongside the disintegration of home- and community-based formal and informal caregiving networks and a fear- and/or access-induced delayed care. Social isolation, not seeking help, and poor coping skills all have exacerbated the unmet health / behavioral health needs of rural older adults.[6] COVID-19 illustrates the necessity of re-engineering ED processes to meet the complex care needs of vulnerable older adults.

TABLE 1: FIVE MEASURES TO ENHANCE OLDER ADULT EMERGENCY CARE DURING THE PANDEMIC

1. Family and paid caregivers for older adults with cognitive and/or functional impairment are not merely "visitors". Work with administration to allow them into the ED.
2. Collaboratively develop replicable consultation and transition protocols with referring nursing and senior living facilities and receiving tertiary care hospitals.
3. Develop Forward Triage Protocols by leveraging technology, relationships with nursing facilities, and payment reform.
4. Improve access to behavioral health resources.
5. Ensure education of all clinicians and staff, including travelers and locums.

First, emergency care must include caregivers in both the evaluation and care plan, despite policies limiting "visitors". Second, the ED should develop replicable consultation and transition protocols with referring senior living facilities and receiving larger hospitals, to promote efficiency and patient safety during periods of systemic stress. Third, health care systems should leverage technology and recent payment reform to develop forward triage protocols to identify those older adults most likely to benefit from transfer to the ED. Forward triage models are rapidly evolving, and often involve ED-based clinicians collaborating with community paramedics and staff at referring facilities. The Centers for Medicare & Medicaid Services' Emergency Triage, Treat, and Transport (T3 Model) is an important new forward triage mechanism with national impact (innovation.cms.gov/innovation-models/et3). Fourth, ED sites should improve access to behavioral health resources within and beyond the ED for those older adults who need this support. Finally, as many rural emergency clinicians and staff may be travelers or temporary employees, systems should educate clinicians and staff regarding evolving local protocols and resources specific to the care of older adults.

The COVID pandemic highlights the ED's critical role as a center of care coordination within the geriatric continuum of care. Some rural communities are more vulnerable than others due to their ability to mitigate, treat, and delay transmission of COVID-19 and to reduce its economic and social impacts.[7,8] This crisis illustrates the necessity of collaboration and communication between the ED and all other sites of care. In rural environments lacking outpatient resources, older adults often move between home, hospital, rehab, nursing home, and senior/assisted living only after assessment and risk stratification in the ED. To secure these transitions and prepare for potential surges at one or more sites, the ED may partner with referring and receiving entities on efficient, 24/7 transition protocols.

SPECIAL CONSIDERATIONS FOR OLDER ADULTS SUSPECTED OF COVID-19 IN RURAL SETTINGS

COVID is typically more difficult to diagnose in older adults, who frequently present atypically. This is complicated in the rural setting by limited or delayed COVID testing. Safe disposition of COVID-suspected older adults must consider the strength of the home care environment and the ability to readily follow-up in settings with scant and decreasing primary care and community resources.[7] For COVID patients requiring

intensive care resources, rural EDs must often coordinate transfer to tertiary care at a time when larger centers may be overwhelmed and surrogate decision makers are not present.

STRATEGIES TO PREPARE FOR COVID-19 IN RURAL SETTINGS

Two strategies are recommended to support rural EDs. One is provided by the Surgo Foundation (precisionforCOVID.org/ccvi). This tool has combined the Center for Disease Control and Prevention social vulnerability index (socioeconomic status, household composition and disability, minority status and language, and housing type and transportation) with COVID-19 specific vulnerability factors (epidemiologic factors and healthcare system factors) to identify communities which may need the most support. The website shows states and counties with varying degrees of social vulnerability. This can be used to identify vulnerable systems/hospitals that can then meet to develop strategies and resources addressing unmet needs.

Another practical strategy to better understand the social resources and needs of rural older adults is to invite the local county representative of the Aging and Disabilities Resource Center to present at an ED staff meeting. This presentation should describe the local problems and develop resources assisting vulnerable older ED patients during the COVID-19 pandemic.

TABLE 2: TEN KEY STEPS TO MANAGE AN OLDER PATIENT IN THE RURAL ED DURING THE COVID-19 PANDEMIC

1. Due to COVID-19, rural providers are treating older adults with greater acuity and complexity using decreased resources. In this context it is helpful to develop and employ a rapid, comprehensive assessment that includes recognition of cognitive and functional impairment. Recent recommendations for brief cognitive and functional assessment are included below.[9]
2. Many older adults with life-limiting illness present to the ED with unmet palliative care needs. Practice the core palliative skills of assessment of medical decision-making capacity, rapid prognosis, rapid goals of care conversations, and symptom management. References regarding ED-based palliative practices are below.[10-12]
3. Establish a system to ensure complete information transfer during evaluation and transitions of care with caregivers and referring and receiving facilities. Use Institute for Healthcare Improvement tools for rapid cycles of measuring, feedback and improvement (http://www.IHI.org).
4. The transfer of a patient from a skilled nursing facility to the ED requires a verbal handoff between providers at each site of care. This central communicator role is more challenging during the pandemic, as caregiver/historians and case management/social work may not be present in the emergency department.
5. Family and paid caregivers are the center of an older adult's care team. They are not social visitors. Work with administration to construct policies facilitating their presence in the ED.[13]
6. Rural facilities often transfer patients for specialty or intensive care. Transfer capacity, decisions, and logistics may be complicated by COVID-19. Practice shared decision-making regarding transfer by discussing risk, benefits, and alternatives with the patient, surrogate, and receiving facility. Refine and strengthen communication and transfer protocols for complex older adults in light of potential difficulties wrought by the pandemic.
7. Older adults and senior living facilities may be hesitant to pursue emergency care during the pandemic. Collaborate with these facilities to deploy forward triage models that identify patients requiring ED resources. These models include community paramedicine, nursing home-based telemedicine, and tertiary care-based emergency department telehealth.[14]
8. The pandemic illustrates the importance of geriatric-specific emergency knowledge, specifically regarding atypical presentations, adverse medication events, transitions of care, and palliative care. Design and disseminate multidisciplinary education specific to older adults emergency care needs.[15-16]
9. Rural hospital and community resources are at risk of becoming overwhelmed in the face of a COVID-19 surge. Collaborate with residential and nursing facilities, homecare, receiving larger hospitals, and local, state, and federal agencies to design and practice a surge protocol.
10. Some emergency departments have experienced a decrease in patient volumes in response to patients' wish to avoid exposure to hospital infection risk, and due to uncertainty of their ability to return to their residence. Emergency department leadership can work with home health care programs to develop care paths which will allow for stable patients to safely return home.

KEY WORDS: rural older adult, emergency medicine, COVID-19

AFFILATIONS

Adam Perry, MD	Emergency Physician/Geriatrician- GEDC
Becky Weeks, RN, MN	Nurse Clinician, Nursing Administration – Advocate Aurora Health
Asma Sabih, MD	Geriatric Fellow – Advocate Aurora Health
Michael L Malone, MD	Medical Director, Senior Services – Advocate Aurora Health

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