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Review Article

Reframing Emergency Care for Geriatric Patients: The Central Role of Frailty

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Abstract

Background: Frailty is a multidimensional syndrome characterized by a reduced physiological reserve, exposing older adults to the dangerous adverse consequences of acute illness or injury. In the Emergency Department (ED), traditional assessment models often fail to detect and estimate vulnerability, leading to undertriage, delayed or inappropriate interventions, and poor outcomes.

Objective: To advocate for the systematic integration of frailty assessment in emergency medicine using the ABCDE-F framework. The addition of "Frailty" as the "F" in the emergency care patient primary survey (Airway, Breathing, Circulation, Disability, Exposure, and ABCDE) reflects a growing consensus that frailty must be addressed as a core clinical concern in acute care.

Methods: This review synthesizes the recent literature on the impact of frailty assessment in geriatric ED patients and its implications for ethical, efficient, and patient-centered emergency care.

Results: Integrating frailty into ED workflows improves risk stratification, aligns treatment with patient goals, and reduces unnecessary admissions and intervention. The ABCDEF model offers a structured and actionable framework for emergency physicians.

Conclusion: Early recognition of frailty is crucial in acute care settings. The application of the ABCDE-F model had a significant transformative impact on emergency care for older adults. Its integration is expected to enhance the outcomes and management of geriatric patients in the emergency department.

Keywords: Elderly; Emergency medicine; Frailty; Geriatric assessment; Triage

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Introduction

Globally, geriatric patients are increasingly represented in Emergency Department (ED) admissions, a trend attributed to demographic changes and enhanced life expectancy. Older adults account for approximately one-quarter of all ED visits, with reports indicating a range of 17% to 27%, subject to regional variability and differences in age cutoff criteria [1,2]. These statistics underscore the need for emergency care systems to evolve to address the unique care requirements of a rapidly aging society. Elderly individuals often present with complex medical needs involving multiple domains, including chronic diseases, dementia, and functional impairments. Their conditions frequently manifest as atypical or non-specific symptoms, such as delirium, falls, weakness, or anorexia, which forces ED professionals to reconsider conventional diagnostic frameworks. Additionally, social vulnerability, limited support networks, and polypharmacy further compounded clinical decision-making [3,4]. Collectively, these issues underscore the need for a fundamental shift in emergency care practices, advocating a transition from traditional acute-focused models to a more comprehensive approach that incorporates an understanding of geriatric fundamentals.

Frailty in geriatric patients is a clinical syndrome characterized by a decline in physiological reserve and increased vulnerability to stressors, resulting in reduced ability to maintain homeostasis after acute illnesses or trauma. It is a multidimensional condition that involves deficits in physical performance, cognition, nutrition, mobility and social support [5]. Frailty is distinct from the biological processes of aging and comorbidity. It represents a state of decompensated function across multiple systems, leading to poor outcomes such as falls, delirium, hospitalization, functional decline, and death. Up to 37% of ED geriatric patients are frail [6]. Recently, frailty has emerged as a key clinical concept to assess risks and tailor the care of elderly patients in the ED. It serves as a guide for appropriate triage, resource utilization, and care planning. In emergency medicine, the early identification of frailty enables clinicians to tailor interventions, anticipate potential complications, and align care with patient values. Consequently, frailty is increasingly recognized as a "vital sign" for geriatric patients in acute care settings [7,8].

Best Practices and Emerging Models for Geriatric Emergency Care

The ABCDE-F framework: A new standard for geriatric emergency assessment

The ABCDE approach (Airway, Breathing, Circulation, Disability, and Exposure) is the foundation for rapid patient assessment and stabilization in emergency care [9]. Recently, the European Society of Intensive Care Medicine (ESICM) has formally recommended the addition of a sixth domain: "F" for frailty. This expansion of the framework reflects the growing recognition that physiological vulnerability, often masked by stable vital signs, is a critical determinant of outcomes in patients aged 80 and older [10]. Notably, some experts now emphasize frailty assessment by placing F ahead of traditional

ABCDE priorities, mainly in older patients, whose outcomes depend more on baseline vulnerability than on acute illness.

Frailty is associated with high rates of morbidity, mortality, prolonged hospitalization and institutionalization [6]. The inclusion of frailty in the primary survey facilitates early risk stratification, enabling clinicians to adjust the intensity and trajectory of care accordingly. By incorporating frailty assessment into emergency care protocols at the bedside, the ABCDE-F model facilitates a change from reactive, pathology-focused treatment to proactive, person-centered decision-making. It provides a framework for identifying patients who may benefit from early palliative care referral, Comprehensive Geriatric Assessment (CGA), or admission to Intensive Care Units (ICU). It also emphasizes the importance of engagement with patient goals and values, particularly when considering high-burden therapies. The ABCDE-F approach represents a standardized framework that enhances communication among emergency, critical care, and geriatric teams, thereby promoting interdisciplinary collaborations [8,11].

Early recognition of frailty and triage innovation

Conventional triage systems in the ED are designed to detect acute physiological instability, often failing to recognize the underlying vulnerability of older adults [12]. Frailty, affecting up to 50% of ED patients aged ≥70 years, is frequently under-identified despite its strong association with adverse outcomes. Many frail patients present atypically, lacking classic clinical manifestations, such as fever in sepsis or hypotension in hemorrhage. In response, frailty screening tools have been developed and validated to support the timely identification of individuals at risk and optimize the approach and delivery of acute care [13]. The Clinical Frailty Scale (CFS) is a 9-point scale based on clinician judgment of physical function, mobility and dependence in daily activities. Its strength lies in its speed (it can be completed in less than a minute), reproducibility, and proven predictive power. Studies have consistently shown that CFS scores ≥5 correlate with an increased risk of hospital admission, prolonged length of stay, ICU utilization, and 30- and 90-day mortality. In contrast to purely physiological metrics, CFS provides contextual information regarding preexisting functional status and care requirements. This makes it particularly valuable in decision-making processes related to admission, escalation of care and palliative approaches [14,15].

The Identification of Seniors at Risk (ISAR) tool is a brief, six-question self-report screening instrument designed for patients aged 65 years or older. It evaluates recent hospitalization, visual impairment, functional dependence, cognitive complaints, polypharmacy, and overall perceived health. A score of ≥2 has been shown to predict ED revisits, functional deterioration and institutionalization. ISAR is highly feasible for routine triage by nursing staff and does not require clinical judgment, making it valuable in acute care settings. It serves as an effective screening trigger for subsequent geriatric assessments, such as GCA [16].

The Triage Risk Screening Tool (TRST) builds on ISAR by incorporating caregiver burden and recent ED usage to better identify patients at risk for repeat visits and complex discharge needs. It includes assessment of cognitive impairment, difficulties in ambulation or transfer, polypharmacy and social isolation. The TRST is effective for flagging patients who may benefit from the early involvement of geriatric or social work teams. Research supports its use in enhancing care transitions and reducing avoidable readmissions. Similar to ISAR, TRST is nurse-administered, quick to complete, and does not rely on specialist input [17]. ISAR is faster and patient-reported, making it ideal for quick self-assessment while TRST offers a broader clinical context, often requiring chart review or staff input. The risk stratification of geriatric patients using ISAR or TRST is comparable in identifying elderly emergency department patients who may benefit from comprehensive geriatric assessment [18].

Several emerging tools and scores offer additional precision in frailty detection at triage [19,20]. Among them, the recently validated ED-Frailty Screening (ED-FraS) tool was designed for rapid application and incorporates variables related to chronic disease burden and basic functioning. Its ease of use and high sensitivity make it a promising addition to screening toolkits, especially in systems lacking embedded geriatric expertise [21]. The PRISMA-7 is a concise questionnaire with high sensitivity for frailty-related outcomes. It is particularly suited for large-scale implementation owing to its simplicity. However, some studies have suggested that when used alone, it may lack sufficient specificity. Combining PRISMA-7 with functional tools such as CFS has been shown to improve the predictive accuracy for outcomes such as hospitalization, mortality and long-term care needs [22]. Finally, the Triage Frailty and Comorbidity (TFC) tool uniquely integrates frailty scores with the Charlson Comorbidity Index, aiming to more precisely stratify the risk for 90-day mortality. This dual-domain approach enables a more nuanced understanding of both chronic disease burden and functional vulnerability, supporting better decision-making regarding escalation of care, admission thresholds, and palliative referral [23].

These triage instruments offer several advantages: they are efficient, typically require less than five minutes to use, require minimal training, and are adaptable to diverse ED settings. Notably, they facilitate the transition from disease-centered to person-centered emergency care. Their integration into triage pathways has been shown to improve the early identification of high-risk geriatric patients; facilitate the timely initiation of CGA; reduce unnecessary diagnostics, hospitalizations, and ED revisits; and enhance communication during care transitions [14]. Ultimately, frailty screening tools serve as a bridge between acute care priorities and geriatric principles, supporting individualized care, resource stewardship, and improved outcomes. Their systematic use in EDs represents a low-cost, high-yield intervention to address the complex needs of the geriatric population.

Frailty and trauma

Traditional trauma systems were initially designed for young, healthy individuals who sustained high-energy injuries. In recent decades, older adults who have experienced low-energy mechanism trauma, such as falls from a standing height, represent most trauma cases admitted to the ED [24]. Elderly traumatized patients are often under-triaged and may receive suboptimal care due to underestimation of injuries and persistent biases regarding age, prognosis and resource distribution [25]. The Advanced Trauma Life Support (ATLS) framework recommends systematic ABCDE assessment [9]. Frailty is a more powerful predictor of trauma outcomes than age or injury severity. Frail trauma patients present a considerable challenge in EDs. A positive frailty score has been associated with poorer trauma outcomes even in the context of moderate injury severity. Studies have shown that incorporating CFS at presentation improves outcome prediction and care alignment. Integrating frailty into trauma documentation, triage criteria, and resuscitation room checklists requires minimal interference with current workflows but can yield

high-impact benefits. Pre-injury frailty was correlated with higher rates of in-hospital mortality and ICU admission, complications, prolonged hospital stay, functional decline, and institutionalization [26,27]. The ABCDE-F framework should be applied in geriatric trauma settings [28]. Incorporating frailty into early trauma evaluation aligns care with a patient's pre-injury baseline, functional goals and recovery potential. This encourages an approach that prioritizes quality of life, minimizes iatrogenic harm and respects patient autonomy. Early frailty assessment enables emergency physicians to activate trauma teams appropriately based on functional status rather than age alone; anticipate complications such as delirium, bleeding risk, and drug interactions; and guide decisions on ICU admission and surgical candidacy. Frail-traumatized patients should undergo early CGA evaluation (within 48 hours), physiotherapy, or palliative care consultation [29].

Aging and frailty significantly alter the physiological responses to trauma. Older adults often exhibit blunted inflammatory and neuroendocrine responses, limited cardiovascular compensation, and impaired thermoregulation]. These changes contribute to delayed or atypical clinical signs, which can mask the severity of the injury [30]. The Injury Severity Score (ISS) is a tool used to assess the severity of trauma. The ISS is calculated by summing the squares of the highest Abbreviated Injury Scale (AIS) scores for the three most severely injured body regions. It ranges from 0 to 75, with higher scores indicating more severe injuries. In geriatric trauma, ISS can be a useful predictor of mortality, but its accuracy may vary compared to younger patients. Its application to geriatric patients requires careful consideration due to age-related physiological differences and increased vulnerability. While ISS > 20 is generally associated with higher mortality in trauma patients, geriatric patients may exhibit higher mortality rates even with lower ISS scores compared to younger individuals [31].

Emerging evidence shows that frailty and shock index (heart rate divided by systolic blood pressure) are more predictive of poor outcomes than anatomical injury scores in older adults. When coupled with preexisting frailty, a high shock index is strongly associated with mortality, ICU referrals, and the need for resource-intensive interventions [24,32]. Therefore, combining physiological markers with functional assessments at the point of care provides a more accurate estimate of prognosis and can guide timely, individualized decision-making. By delaying frailty evaluation until after stabilization or admission, clinicians may miss a critical window to stratify risks, guide appropriate imaging or surgical decisions, initiate advanced care planning, or engage geriatric and palliative care teams.

Comprehensive Geriatric Assessment (CGA) in the ED

Contrary to the conventional disease-centered model, CGA is a multidimensional and interdisciplinary approach that assesses critical health domains in the elderly. These domains include medical comorbidities, functional status, cognitive function, psychological health, mobility, nutrition, polypharmacy and social support. The objective of CGA is to develop individualized care plans that address the specific vulnerabilities and priorities of older patients and tailor care transitions. The GCA is conducted by a multidisciplinary team comprising geriatricians, nurses, social workers, pharmacists, physiotherapists and occupational therapists [33,34]. In the ED, the integration of CGA, particularly in focused or abbreviated forms, has demonstrated important clinical benefits. Early identification of geriatric syndromes through screening tools such as ISAR or other triage scores, followed by targeted CGA, enables timely recognition of high-risk patients and facilitates more appropriate triage, treatment, and discharge planning [13,35]. Evidence from systematic reviews and meta-analyses indicates that CGA-based interventions in the ED are associated with reduced rates of hospitalization, functional decline, and institutionalization, especially among frail older adults. Furthermore, early assessment and intervention by ED-based Health and Social Care Professional (HSCP) teams have been shown to reduce ED length of stay, decrease the likelihood of unnecessary hospital admissions, and improve patient satisfaction. These outcomes are particularly important in preventing iatrogenic complications such as delirium, loss of independence, and subsequent long-term care placement [34,36,37]. Therefore, CGA is not only a clinically effective strategy but also a health systems-level response to the growing demand for age-sensitive acute care. Its routine implementation in EDs supports more efficient resource use and reinforces core principles of person-centered care, including autonomy, safety and dignity in aging.

Palliative care integration in emergency services

Among individuals aged 65 years or older in the US, half visited the ED during the last month of life, and three-quarters during the 6 months before their death. Despite these opportunities to improve end-of-life care, emergency care has not fully adapted to the needs or goals of older adults with serious illness who prefer to have care delivered at home [38]. Early integration of palliative care in the ED allows alignment of acute interventions with the goals, values, and clinical realities of frail older adults with limited prognoses. Emergency presentations often represent a critical inflection point in the illness trajectory of these patients, offering a time-sensitive opportunity to initiate discussions regarding prognosis, care preferences, and the appropriate intensity of treatment. Frailty assessment tools, such as the CFS, and prognostic screening instruments, including the Supportive and Palliative Care Indicators Tool (SPICT) and the "Surprise Question" ("Would you be surprised if this patient died in the next 12 months?") enable ED physicians to identify individuals who would benefit from early palliative care [39,40].

Studies have shown that initiating palliative care during ED stay improves symptom management, enhances patient and caregiver satisfaction, and facilitates timely transitions to hospice or community-based palliative services. Moreover, it has been associated with decreased ICU admissions, reduced length of hospital stay, and fewer non-beneficial interventions, thereby supporting both patient-centered and resource-conscious care [13,41]. For many frail patients, ED-based palliative consultation may be the only opportunity to clarify advance directives or redirect care toward comfort and dignity. As health systems strive to deliver more ethical, humane, and sustainable care for aging populations, the early involvement of palliative care within the ED represents a best-practice model that ensures high-value care.

Medication safety and polypharmacy in older adults in the ED

Effective medication management is fundamental to ensuring safe and efficacious emergency care for older adults who frequently present with polypharmacy and an increased risk of Adverse Drug Events (ADE). Physiological changes in aging, such as reduced renal and hepatic clearance, altered pharmacodynamics, and increased sensitivity to central nervous system-active agents, amplify the risks associated

with many common medications [42,43]. In emergency settings, there is a risk of overlooking existing prescriptions or initiating potentially inappropriate medications without comprehensive knowledge of the patient's medical history, comorbidities, or functional status. The Beers Criteria, developed by the American Geriatrics Society, provide an evidence-based list of medications that should generally be avoided or used with caution in older adults because of their association with falls, delirium, bleeding, and cardiovascular complications. Commonly flagged medications include benzodiazepines, anticholinergics, anti-inflammatory drugs, antipsychotics and long-acting sulphonylureas. In the ED context, adherence to Beers-based screening can prevent iatrogenic harm, ADE and reduce hospitalizations [44].

Structured medication reconciliation, ideally involving a clinical pharmacist or a geriatric-trained provider, can identify high-risk drugs, clarify dosing errors, and provide opportunities for deprescribing [45]. The Screening Tool of Older Persons' Prescriptions (STOPP) and the Screening Tool to Alert to Right Treatment (START) criteria comprise a total of 114 criteria, consisting of 80 STOPP and 34 START criteria, and are used to identify potentially inappropriate medications and potential prescribing omissions in geriatric patients. STOPP focuses on medications that could be harmful or cause adverse effects, while START identifies medications that are potentially beneficial and should be considered for initiation. A randomised controlled trial demonstrated that using the STOPP/START criteria as an intervention significantly improved medication appropriateness in older people hospitalised for acute illness [46].

Identifying medication-related harm as a cause of ED visits (e.g., falls, syncope, bleeding, and altered mental status) is critical for targeted interventions and future risk reduction. Given that medication-related problems are among the most preventable causes of morbidity and ED readmission in older adults, the systematic use of prescribing safety frameworks should be a standard component of geriatric-focused emergency care.

Geriatric emergency departments

Geriatric Emergency Departments (GEDs) represent a transformative model of care designed to meet the specific needs of older adults in emergency settings. Developed in response to the limitations of conventional EDs for managing frail, multimorbid, or cognitively impaired older patients, GEDs incorporate targeted modifications in clinical workflows, physical environment, and team composition [47-49]. The Geriatric Emergency Department Accreditation (GEDA) program, established by the American College of Emergency Physicians (ACEP) in partnership with international geriatric societies, formalizes this model through tiered certification standards [50]. These standards include geriatric-focused protocols, interdisciplinary staffing (including geriatric-trained physicians, nurses, pharmacists, and therapists), and environmental enhancements such as mobility aids, enhanced lighting, dementia-friendly signage, and sound-minimizing design elements [51]. GEDs prioritize early identification of geriatric syndromes using validated screening tools for delirium, falls risk, cognitive impairment, functional decline, polypharmacy, and caregiver burden. These assessments enable targeted interventions, such as CGA, safe discharge planning, medication reconciliation and referrals to community-based services. The integration of such practices leads to demonstrable improvements in both process- and patient-centered outcomes [52,53].

Evidence from both U.S. and European studies shows that GED implementation is associated with significant clinical benefits. These include reductions in hospital admission rates (by up to 18-25%), decreased ED length of stay, fewer return ED visits, and improved rates of discharge to home rather than institutional settings [54]. Patients managed in GEDs reported higher satisfaction and more consistent alignment of care with personal values and goals. Additionally, there was a noted reduction in iatrogenic harm, including lower rates of in-hospital delirium and adverse drug events. Health system benefits include cost savings through avoidance of unnecessary admissions, optimized resource use, and improved care coordination [55]. Ultimately, the GEDA framework provides a scalable roadmap for disseminating this innovation, ensuring that EDs across diverse settings can deliver care that is safer, more efficient, and more humane for an aging population.

Implementation Challenges in Geriatric Emergency Care

The successful delivery of geriatric emergency care relies on a strong technological infrastructure, skilled and trained personnel, and strategic implementation. Shared electronic health records (EHRs) are essential for ensuring continuity of care across settings. They provide emergency clinicians with access to critical background data, such as prior CGAs, medication lists, frailty scores, and advance care planning documentation that facilitates more accurate diagnoses, avoids redundant interventions, and supports safer transitions between care environments. Standardizing the documentation of frailty and CGA findings within the EHR enhances interdisciplinary communication and ensures that older adults receive coherent value-based care, even during high-acuity presentations [56].

Telemedicine innovations further expand the reach of geriatric expertise, especially in under-resourced or rural area EDs. Virtual consultations enabled remote geriatricians to participate in real-time assessments, CGA discussions, and complex care planning. This model has proven to be especially effective during the recent pandemic, maintaining access to specialized inputs where on-site geriatric services are unavailable [57,58]. A key determinant of success in geriatric emergency care is the competence of the ED personnel. Emergency clinicians must receive formal training on geriatric syndromes, communication strategies, ethical decision-making and functional assessments. Embedding the ABCDE-F framework in clinical education and simulation programs fosters consistency in applying age-sensitive care principles. However, systemic challenges such as time pressure, moral distress, and high cognitive demands contribute to burnout among ED staff. Addressing these challenges requires institutional commitment to building resilience through mentorship, interdisciplinary learning, and psychological support [59,60].

Artificial Intelligence (AI) is increasingly being recognized as a transformative tool for frailty detection and risk stratification in the ED. AI technologies can help bridge this gap by rapidly analyzing large multidimensional datasets to identify patients at a high risk of adverse outcomes. Innovative approaches have addressed this gap through multifaceted strategies. Dedicated geriatric triage protocols and screening pathways, often nurse-led, are piloted in several high-volume EDs. Some studies have incorporated early CGA triggers based on frailty screening scores. In parallel, predictive analytics and AI-enhanced triage algorithms are being developed to integrate frailty markers, including functional decline, medication burden,

previous ED visits, and baseline cognitive status with real-time EHR data. These models offer the potential to detect vulnerability even before a patient reaches a triage desk [61-63]. Machine learning models trained on structured EHR data, such as laboratory values, medication profiles, vital signs, and diagnostic histories, have demonstrated strong predictive capabilities for identifying frailty and forecasting outcomes such as delirium, hospitalization, 30-day readmission, and mortality [64]. Deep learning models using Convolutional Neural Networks (CNNs) and longitudinal data have further enhanced sensitivity in identifying subtle and progressive patterns of decline [65].

Natural Language Processing (NLP) is an especially promising modality in the ED context, as it enables AI tools to extract frailty-related indicators embedded in unstructured clinical notes, such as mentions of fatigue, falls, weight loss and cognitive decline. NLP-enhanced systems have been shown to improve frailty detection rates, inform early geriatric consultations, and reduce inappropriate discharges [66]. Hybrid models that combine structured and unstructured data have yielded superior predictive accuracies, outperforming traditional scoring systems and rule-based checklists. It is important to emphasize that AI supports do not replace the clinical evaluation of frailty, ABCDE-F approach, or CGA activity.

Barriers and Limitations in Advancing Emergency Care for Frail Geriatric Patients

Critically, ageism remains an under-recognized but pervasive barrier to optimal care for older adults in the ED. Stereotypical perceptions of older patients as less resilient, less likely to benefit from aggressive interventions, or inherently burdensome can bias clinical judgment and deprioritize appropriate assessments. This implicit bias contributes to diagnostic overshadowing, under-triage, and the omission of nuanced care planning for frail or cognitively impaired individuals [67]. Combating ageism demands a cultural shift within emergency medicine that reframes aging not as a limitation but as a phase requiring personalized, dignified, and evidence-informed care. Efforts to raise awareness, reflect on language, include older adults in quality improvement discussions, and promote geriatric champions within ED teams are vital steps toward this transformation.

Despite the growing momentum, the implementation of geriatric innovations continues to face persistent barriers. These include staffing shortages, limited geriatric expertise, resistance to workflow changes, and entrenched attitudes that devalue the complexity and worth of elderly care. On the other hand, facilitators, such as national guidelines, compelling outcome data, interdisciplinary leadership, and financial incentives, create fertile ground for systemic change. Implementation science offers a roadmap for scaling these solutions across diverse settings, ensuring adaptability, sustainability and equity. Integrating geriatric principles into emergency medicine not only enhances outcomes, but also affirms a societal commitment to the dignity, autonomy, and safety of older adults during their most vulnerable moments.

The real-world implementation of AI in EDs faces significant challenges. Many models lack external validation or are not interoperable with the existing hospital systems. Concerns regarding algorithmic bias and data privacy opacity persisted. Studies have highlighted the underrepresentation of minority groups, non-English speakers, and cognitively impaired patients in training datasets, raising concerns about equity and generalizability. Mitigation strategies include federated learning, homomorphic encryption, and rigorous auditing to ensure fairness [66]. Clinicians' involvement in the design and validation of AI is essential. Co-development models that include emergency physicians and geriatricians improve the model relevance, facilitate integration into workflows, and foster user trust. Training programs in AI literacy should be incorporated into emergency medicine education to prepare clinicians to collaborate with AI tools. National AI validation programs, common benchmark datasets, and interoperability frameworks will be critical for scaling these innovations. When ethically deployed and clinically validated, AI-based frailty detection tools have the potential to significantly improve geriatric care in emergency settings, enabling earlier, more targeted, and person-centered interventions for one of the most vulnerable patient populations [68].

Conclusion

Frailty has emerged as a central concern in ensuring safe, effective, and ethical sound care of older adults in the ED. As the population ages and EDs increasingly serve as the frontline of acute care for frail individuals, the need for a structured, anticipatory approach has become urgent. The ABCDE-F framework, which expands the traditional primary survey to include frailty, formally recognizes the unique vulnerabilities of older patients and offers a practical roadmap for translating geriatric principles into real-time emergency care. Integrating early frailty assessment into ED workflows enhances clinical precision by identifying high-risk patients who may otherwise be undertriaged or mismanaged. When combined with CGA, the model supports individualized care planning, better alignment with patient values, and improved care transitions [69]. The incorporation of AI tools further strengthens risk stratification by leveraging real-time data to guide decision making. Interdisciplinary collaboration among emergency physicians, geriatricians, nurses, pharmacists, therapists, and social workers is essential to deliver coordinated, goal-concordant interventions. Table 1 summarizes the core concepts reported in this review.

• Frailty is a critical determinant of outcome in older adults presenting to the ED, yet it remains under-recognized in routine acute care pathways
• Frailty should be treated as a vital sign, a core element of acute assessment
• The ABCDE-F framework, offers a structured, patient-centered model for integrating geriatric assessment into ED care. ABCDE-F is universal: relevant for trauma and all acute diseases and conditions in geriatric patients
• Early frailty assessment improves triage accuracy, guides safe and personalized decision-making, and helps prevent functional decline and inappropriate interventions
• Frailty predicts outcomes more accurately than age or single diagnoses
• Comprehensive Geriatric Assessment (CGA) in the ED supports holistic care planning, better discharge coordination, and alignment with patient goals
• Interdisciplinary collaboration is essential to implement frailty-informed care, involving emergency physicians, geriatricians, pharmacists, social workers, palliative care specialists, and case managers
• Addressing ageism and promoting geriatric competencies within emergency teams is necessary to overcome cultural and systemic barriers to high-quality elder care
• Frailty assessment should be incorporated into all ED workflows, records, and checklists, starting at triage
• AI is starting to be employed in the ED for frailty detection and risk stratification to implement, and not replace, CGA

Table 1: Key messages.

Embedding frailty into emergency protocols is a cultural shift that promotes respect, equity, and dignity in critical healthcare settings. It challenges ageist assumptions, fosters holistic thinking, and ensures that care is not just rapid, but correct. The time has come to place frailty among vital signs, such as airway, breathing, and circulation, as crucial considerations in acute care.

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