

Enhancing discharge outcomes through occupational therapy-led geriatric assessment in the emergency department

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Abstract

Occupational therapy (OT) in emergency departments (EDs) plays a vital role in supporting frail older adults, yet traditional OT assessments often lack the multidimensional scope required for comprehensive functional and cognitive evaluation. This study evaluated the association between implementing a modified Comprehensive Geriatric Assessment (CGA) tool, the Mini OT CGA, a structured 8-domain assessment covering cognition, functional ability, falls history, social circumstances, rehabilitation potential, and discharge planning, and discharge-related outcomes within an urban hospital ED. A retrospective pre-post audit compared two 2-month periods: February-March 2020 (standard OT assessment; n=217) and February-March 2021 (Mini OT CGA; n=175). Fisher's exact tests with 95% confidence intervals and Cramér's V were used to assess differences in ED therapy codes, discharge destination, and community service utilization, with the Benjamini-Hochberg adjustment applied to control for multiple post hoc comparisons. Demographic characteristics were comparable between cohorts. Following implementation of the Mini OT CGA, cases recorded as "No Capacity in Team/Ward/Unit" decreased from 28.6% to 6.9% (adjusted $p < 0.01$; Cramér's $V = 0.32$), and discharges home with Rapid Response Team support increased from 5.1% to 12.6% (adjusted $p \approx 0.01$; Cramér's $V = 0.26$). Although statistically detectable, these effects were of small-to-moderate magnitude. The structured assessment was associated with improved identification of functional, cognitive, and social needs; more consistent discharge planning; and increased utilization of community-based pathways, without an increase in acute admission rates. These findings suggest that embedding a multidomain geriatric assessment into routine OT practice in the ED is feasible and may support incremental improvements in care coordination for frail older adults. Further evaluation should explore long-term outcomes, readmission risk, and cost-effectiveness to determine broader applicability across diverse healthcare settings.

Key words: comprehensive geriatric assessment, occupational therapy, emergency department, frail older adults, Mini OT CGA.

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Introduction

With increasing demand on acute hospital services, occupational therapy (OT) has become integral to emergency department (ED) care, particularly for frail older adults who frequently present with complex and multifaceted needs that traditional, medically oriented ED models may not fully address.^{1,2} OT, with its focus on functional independence, daily activity performance and environmental adaptation, is well-positioned to support safe and timely discharge decisions and reduce pressure on hospital resources.^{2,3}

EDs present unique challenges for comprehensive assessment. Time pressure, limited space and rapidly shifting clinical priorities can restrict the depth of evaluation that frail older adults require. Prolonged ED stays increase the risks of delirium, falls, deconditioning and loss of independence, all of which contribute to poorer outcomes for this vulnerable population.^{4,5} Early OT involvement can help mitigate these risks through targeted assessment, equipment provision and coordination with community services.

However, the standard OT assessment (Figure 1) traditionally used in EDs often focuses primarily on baseline function and social circumstances. These assessments frequently lack structured

prompts for evaluating cognition, falls history, environmental safety, social vulnerability and rehabilitation potential, which are essential components of effective discharge planning for older adults.^{6,7} As a result, important functional and cognitive factors may be underrecognized in time-limited ED encounters.

The Comprehensive Geriatric Assessment (CGA) is a multidisciplinary, multidomain evaluative approach that systematically examines medical, cognitive, functional, and psychosocial factors to guide personalized and holistic care planning (Figure 2). Evidence from acute care settings demonstrates that CGA can enhance discharge planning, reduce hospital readmissions and support safer transitions of care for older adults.⁸⁻¹⁰ Despite this, CGA remains underutilized within OT practice in EDs, particularly in the United Kingdom, where its feasibility and clinical impact have not been extensively evaluated.^{2,11,12}

The coronavirus pandemic further underscored the need for efficient, structured ED assessment pathways for older adults. During periods of fluctuating demand and reduced capacity, the ability to rapidly identify functional, cognitive and social needs became increasingly important for avoiding unnecessary admissions and ensuring appropriate use of community-based services.¹³

In response to these challenges, a modified OT-led CGA tool, the Mini OT CGA (Figure 3), was developed at an urban ED and embedded within routine OT practice. The tool was designed to provide a structured, time-efficient, and clinically relevant assessment aligned with recognized geriatric principles while remaining feasible within the operational constraints of ED practice.¹⁴

This study aimed to evaluate the association between implementation of the Mini OT CGA and discharge outcomes for frail older adults. The primary outcome was admission avoidance, examined through ED therapy (EDT) code allocation and discharge destination. Secondary outcomes included changes in the utilization of community support services, improvements in discharge planning and reductions in cases where patients could not be assessed due to capacity constraints. By comparing outcomes before and after implementation, the study sought to contribute evidence regarding the feasibility, clinical relevance and potential system-level benefits of a structured geriatric assessment within ED-based OT practice.

Materials and Methods

This study employed a retrospective pre- and post-audit design to evaluate the association between a modified form of CGA and outcomes within routine OT practice within the ED of a large urban hospital in the United Kingdom. Two equivalent 2-month periods were examined: February to March 2020, during which the standard ED OT assessment was used, and February to March 2021, following the introduction of the Mini OT CGA. The primary outcome of interest was admission avoidance, operationalized through EDT code allocation and discharge destination. EDT codes are a locally developed classification system used within this service to categorize OT outcomes in the ED, including categories for discharge with therapy input, inability to assess due to capacity constraints, onward referral and acute admission. Secondary outcomes included utilization of community-based services, improvements in discharge planning processes and reductions in the number of patients who could not be assessed due to team capacity constraints.

(a)

ED Workflow
Overview
Patient Information
Allergies
Problems and Diagnoses
Procedures and Diagnoses
Orders + Add
Assessments/Fluid Balance
Results Review
Activity List
Histories
Drug Chart
Drug Chart Summary
Medication Request
Clinical Documentation + Add
Clinical Notes + Add
Form Browser
Appointments
Clinical Images + Add
Connected Care
eCoach

OT Mini CGA ED X List

Assessment <Use Free Text>

PC -

PMH -

SOCIAL STATUS

NOK: Contact number:
Lives:
Accommodation type:
Stairs: YES/NO
Key safe: YES/NO
Care package details:
Locality:
Medication management: Self / Carer prompt
NOMAD: Yes / No

COGNITIVE STATUS

CONFUSION: YES/NO Acute/Chronic
Formal diagnosis of dementia? YES/NO

(b)

Menu
ED Workflow
Overview
Patient Information
Allergies
Problems and Diagnoses
Procedures and Diagnoses
Orders + Add
Assessments/Fluid Balance
Results Review
Activity List
Histories
Drug Chart
Drug Chart Summary
Medication Request
Clinical Documentation + Add
Clinical Notes + Add
Form Browser
Appointments
Clinical Images + Add
Connected Care
eCoach

Clinical Documentation

OT Mini CGA ED X List

Orientation: DOB Age Year Place

SENSORY NEEDS
Vision:
Auditory:

MOBILITY STATUS
Baseline:
Current mobility:
Mob A/c:
Falls in the last year:

ACTIVITIES OF DAILY LIVING
Baseline:
Washing and dressing:
Meal Preparation:

(c)

Menu
ED Workflow
Overview
Patient Information
Allergies
Problems and Diagnoses
Procedures and Diagnoses
Orders + Add
Assessments/Fluid Balance
Results Review
Activity List
Histories
Drug Chart
Drug Chart Summary
Medication Request
Clinical Documentation + Add
Clinical Notes + Add
Form Browser
Appointments
Clinical Images + Add
Connected Care
eCoach

Clinical Documentation

OT Mini CGA ED X List

Shopping:
Cleaning:
Medication:

Continence: Continent/incontinent

Pressure Areas:
Equipment in situ:
Pendant alarm:

Assessment Outcome
-

Recommendations
-

Plan

Figure 3. Mini Occupational Therapy Comprehensive Geriatric Assessment tool, shown as embedded in the electronic patient record. a) Social and cognitive status; b) orientation, sensory needs, mobility status and activities of daily living; c) continence, equipment, assessment outcome, recommendations and plan.

The study hospital receives more than 100,000 ED attendances annually and provides acute medical services to a population of approximately 600,000 residents. Frail older adults represent a substantial proportion of ED presentations and frequently require multidisciplinary assessment due to functional, cognitive and social complexity.¹⁵

The audit was conducted across three ED-associated clinical areas: the ED observation unit, the majors and minors zones and the Acute Medical Unit. These areas represent high-acuity clinical environments where OTs routinely assess older adults with multimorbidity, reduced functional capacity and complex psychosocial needs. The hospital serves a diverse urban population with a sizeable proportion of older adults who frequently require multidisciplinary input during acute episodes of care.

Five qualified OTs, each with a minimum of 2 years of experience in acute or ED-based practice, completed all assessments, clinical documentation and discharge planning during both periods. Inter-rater consistency was supported through shared training, supervised practice, weekly case reflection sessions and peer review of documentation. No significant discrepancies in assessment or documentation quality were identified during supervisory review.

Patients were eligible for inclusion if they were aged 65 years or older, medically stable and referred for OT assessment as part of discharge planning. Medical stability was defined as having been reviewed and cleared by the ED medical team as suitable for discharge planning. OT interventions included equipment provision, functional assessment, discharge planning and liaison with community or social care services. Patients requiring immediate admission or presenting with acute cognitive or medical instability that prevented safe assessment were excluded.

The February to March timeframe was selected because it represents a period of consistently high ED demand while avoiding seasonal anomalies that might disproportionately influence frailty presentations. Matching identical months across both years also reduced the likelihood of seasonal confounding.

In the pre-implementation phase (February–March 2020), the standard OT assessment was used. This assessment captured base-

line mobility, transfers, functional ability, social circumstances and immediate therapy needs. However, it did not include structured prompts for cognition, delirium risk, environmental safety, falls history or rehabilitation potential, limiting the comprehensiveness of discharge planning for frail older adults.

In the post-implementation phase (February–March 2021), the Mini OT CGA was introduced. The Mini OT CGA is a structured, multidomain assessment tool developed for National Health Service (NHS) emergency department practice and adapted from established comprehensive geriatric assessment frameworks.^{8,9,16} It was developed specifically for OT-led use in the ED to enhance the depth and consistency of assessment while remaining feasible in time-pressured acute environments. The tool comprises 8 domains aligned with geriatric best practice:⁹ patient demographics; social history and support network; cognitive screening including orientation, memory and delirium indicators; functional ability including mobility, transfers, activities of daily living (ADLs), gait and fatigue; falls history and risk factors; baseline ADLs; equipment and therapy recommendations; and discharge planning including appropriateness for Rapid Response Team, social care or community hospital pathways (Table 1). The Mini OT CGA was fully integrated into the hospital's electronic patient record (EPR) to streamline documentation and enhance interdisciplinary communication.

Prior to implementation, OTs undertook structured training on CGA principles, supervised case simulations and practical sessions using the EPR-embedded tool. Weekly supervision and peer reflection supported consistent use of the Mini OT CGA across the clinical team.

Data were extracted from OT referral logs and EPR documentation. Variables included demographics, assessment type, interventions provided, EDT codes, discharge destination, and referrals to community-based services. Missing data were minimal. Where variables were incomplete, cases were excluded pairwise, and no imputation was used. Missingness did not differ significantly between cohorts.

Several strategies were implemented to minimize potential con-

Table 1. Comparison of standard emergency department occupational therapy assessment and Mini occupational therapy comprehensive geriatric assessment.

Assessment domain	Standard ED OT assessment	Mini OT CGA
Primary purpose	Rapid functional screening to support immediate discharge decisions	Structured, multidomain geriatric assessment adapted for ED-based OT practice
Cognitive assessment	Not routinely included	Structured cognitive screening including orientation, memory and delirium indicators
Functional assessment	Basic assessment of mobility and transfers	Detailed assessment of mobility, transfers, ADLs, gait and fatigue
Falls history	Not explicitly assessed	Structured assessment of falls history and associated risk factors
Social and environmental factors	Limited documentation of social circumstances	Expanded assessment of support networks and home environment
Rehabilitation potential	Based on clinician judgement without structured prompts	Explicit domain addressing rehabilitation potential
Discharge planning	General discharge recommendations	Structured discharge planning incorporating rapid response, social care and community pathways
Documentation format	Free-text electronic documentation	Structured EPR template integrated with multidisciplinary workflows
Estimated completion time	Approximately 10–12 minutes	Approximately 15–20 minutes

ED, emergency department; OT, occupational therapy; CGA, comprehensive geriatric assessment; ADLs, activities of daily living; EPR, electronic patient record.

founding, including selecting identical calendar months to reduce seasonal variation. Senior clinicians confirmed that OT staffing, referral pathways, eligibility criteria, ED workflow and access to community services remained unchanged across the study periods. Baseline demographic and clinical characteristics showed no significant differences between cohorts, indicating that patient case mix remained comparable. Residual confounding related to wider COVID-19 system pressures, variations in ED attendance patterns and unmeasured social or clinical variables cannot be fully excluded.¹³

The audit was registered as a service evaluation with the hospital's research and governance committee. As anonymized routine data were used, formal patient consent was not required under NHS guidance.¹⁷

Descriptive statistics summarized demographic data. Fisher's exact tests were used for categorical comparisons due to small cell frequencies. Age was compared using the Mann-Whitney U test. 95% confidence intervals were calculated for key differences in proportions. Effect sizes were reported using Cramér's V.¹⁸ Exact p-values are provided throughout. The Benjamini-Hochberg procedure was used to adjust post hoc comparisons for multiple testing, applied within outcome families (EDT code distribution and discharge destination) to control the false discovery rate at 5%.¹⁹ Cramér's V values were interpreted using conventional thresholds (approximately 0.10 = small; 0.30 = moderate; 0.50 = large). All statistical analyses were undertaken using R statistical software (version 4.3.1; R Core Team, 2023).²⁰

Results

A total of 392 referrals for OT assessment were recorded across the two audit periods. In the pre-implementation phase (February-March 2020), 217 older adults received OT assessment using the standard ED documentation, whereas 175 were assessed using the Mini OT CGA during February-March 2021. The referral volumes in both periods reflect typical activity for the department during these months and suggest broadly stable service demand.

Baseline demographic and clinical characteristics were comparable between the two cohorts, with no statistically significant differences in age, sex, living situation, residential status, functional independence, mobility aid use, cognitive impairment or falls history (Table 2). The comparability of baseline demographics strengthens confidence that observed differences in outcomes were associated with the introduction of the Mini OT CGA rather than changes in case mix.

Following the implementation of the Mini OT CGA, differences were observed in the distribution of EDT code allocation (Table 3). The proportion of patients categorized as "No Capacity in Team/Ward/Unit" decreased from 28.6% in 2020 to 6.9% in 2021. This difference was statistically significant on global Fisher's exact testing ($p=0.0005$) and remained statistically significant following Benjamini-Hochberg adjustment (adjusted $p<0.01$). The associated effect size was moderate (Cramér's $V=0.32$). The 95% confidence interval for the risk difference (-28.8% to -14.1%) suggests a consistent reduction in the proportion of patients not assessed due to capac-

Table 2. Baseline demographic and clinical characteristics of participants before and after implementation of the Mini occupational therapy comprehensive geriatric assessment.

Characteristic	2020 pre-implementation (n=217)	2021 post-implementation (n=175)
Age, median (IQR), years	83 (78-88)	84 (79-88)
Female sex, n (%)	129 (59.4)	106 (60.6)
Living alone, n (%)	112 (51.6)	89 (50.9)
Residential or care home residence, n (%)	26 (12.0)	23 (13.1)
Independent in ADLs, n (%)	71 (32.7)	59 (33.7)
Use of mobility aid, n (%)	128 (59.0)	102 (58.3)
Documented cognitive impairment, n (%)	62 (28.6)	54 (30.9)
≥1 fall in previous 12 months, n (%)	97 (44.7)	82 (46.9)

Values are presented as n (%) unless otherwise stated. Age was compared using the Mann-Whitney U test; all other variables were compared using Fisher's exact tests. No statistically significant differences were observed between groups (all $p>0.05$). ADLs, activities of daily living; IQR, interquartile range.

Table 3. Distribution of emergency department therapy outcome codes before and after implementation of the Mini occupational therapy comprehensive geriatric assessment.

EDT outcome code	2020 pre-implementation (n=217)	2021 post-implementation (n=175)	Total (n=392)
Inappropriate referral	1 (0.5)	4 (2.3)	5 (1.3)
Discharged with therapy input only	111 (51.2)	108 (61.7)	219 (55.9)
Medically unwell or admitted	22 (10.1)	20 (11.4)	42 (10.7)
No capacity in team/ward/unit	62 (28.6)	12 (6.9)	74 (18.9)
Information-gathering input only	10 (4.6)	15 (8.6)	25 (6.4)
Follow-up calls	8 (3.7)	7 (4.0)	15 (3.8)
Self-discharge	0 (0.0)	1 (0.6)	1 (0.3)
Rehabilitation input	1 (0.5)	8 (4.6)	9 (2.3)

Values are presented as n (%). Global Fisher's exact test for distributional differences: $p=0.0005$ (Benjamini-Hochberg adjusted). Effect size: Cramér's $V=0.32$ (moderate). Percentages are descriptive; no individual category-level hypothesis testing was performed.

ity constraints. The Benjamini-Hochberg procedure was applied across post hoc comparisons within the EDT code outcome family to control the false discovery rate at 5%; reported p-values reflect global tests of distributional differences rather than independent hypothesis testing of individual EDT categories, which are presented descriptively.

The proportion of patients discharged with therapy input increased from 51.2% in 2020 to 61.7% in 2021. Although this trend is consistent with improved assessment completeness, the magnitude of the association was small-to-moderate and the finding should be interpreted cautiously. Increases were also observed in rehabilitation input and information-gathering interventions; however, not all category-level changes retained statistical significance following correction for multiple testing.

Differences in discharge destination were observed between the two audit periods (Table 4). Home discharges without additional support decreased from 68.4% in 2020 to 57.7% in 2021, while home discharges with Rapid Response Team involvement increased from 5.1% to 12.6%. The overall difference in discharge destination distribution was statistically significant on global Fisher's exact testing ($p=0.008$) and remained statistically significant following Benjamini-Hochberg adjustment (adjusted $p\approx0.01$). The associated effect size was moderate (Cramér's $V=0.26$). The 95% confidence interval for the increase in Rapid Response Team-supported discharges (2.1% to 12.5%) indicates uncertainty in the precise magnitude of effect and supports cautious interpretation. Transfers to community hospitals increased from 18.6% to 22.8%; however, this difference did not reach statistical significance after adjustment for multiple testing. Acute inpatient admission rates remained stable across the two periods.

Several comparisons yielded very small p-values due to sparse cell counts; therefore, effect sizes and confidence intervals were prioritized over statistical significance alone when interpreting results. Although statistically detectable differences were observed across several outcomes, the consistently moderate Cramér's V values indicate incremental rather than large clinical effects. Taken together, these findings indicate that implementation of the Mini OT CGA was associated with modest improvements in assessment completeness, workflow efficiency and alignment of discharge pathways with identified patient needs. The magnitude of effects was small to moderate, and results should be interpreted as indicative of incremental system-level improvement rather than transformational change.

Discussion

This study examined the association between integrating a modified CGA tool into OT practice within the ED and discharge-related

outcomes, finding that implementation was associated with modest but consistent improvements in discharge planning processes and access to community-based support for frail older adults. The introduction of the Mini OT CGA coincided with a reduction in the proportion of patients recorded as not assessed due to capacity constraints and an increase in discharges supported by rapid response services. Importantly, these changes occurred without an increase in acute inpatient admission rates, suggesting that enhanced assessment did not shift clinical risk elsewhere within the system.

Although several outcomes reached statistical significance, the magnitude of observed effects was small to moderate, indicating incremental system-level improvement rather than large or transformative change. This distinction is important in the context of service evaluations conducted in time-pressured and resource-constrained environments such as the ED.

The findings are broadly consistent with previous evidence demonstrating that multidimensional geriatric assessment approaches can support safer discharge planning and improved care coordination for older adults.^{8,9,14,21-24} In this study, increased utilization of rapid response and community hospital pathways suggests improved alignment between identified patient needs and discharge destinations, rather than a fundamental change in discharge practice. Given the moderate effect sizes observed, these findings should be interpreted as refinements in decision-making processes rather than evidence of major service transformation.

Baseline demographic and clinical characteristics were comparable between the two cohorts, including age, sex, functional status and prevalence of cognitive impairment. This comparability strengthens the interpretation that observed differences were associated with the assessment approach rather than underlying population differences, although residual confounding related to unmeasured clinical or social variables cannot be fully excluded.

A key contribution of this study is its focus on the application of CGA principles by occupational therapists within the ED, where such approaches remain underutilized.^{2,11} The ED presents inherent challenges for comprehensive assessment, including limited time, high patient turnover and competing clinical priorities.^{15,25,26} Within this context, the Mini OT CGA was intended to support, rather than replace, clinical reasoning by providing a structured framework that promotes consistency, completeness and documentation of assessment across clinicians. Integration of the tool into the EPR, alongside targeted training and supervision, likely supported its feasibility within routine practice.

The observed reduction in cases categorized as not assessed due to capacity may reflect improved workflow efficiency rather than increased staffing or resource availability. Indicators such as reduced no-capacity coding and increased therapy-supported discharges

Table 4. Discharge destinations of patients receiving occupational therapy assessment before and after implementation of the Mini occupational therapy comprehensive geriatric assessment.

Discharge destination	2020 pre-implementation (n=118)	2021 post-implementation (n=127)	Total (n=245)
Home with previous support	70 (59.3)	69 (54.3)	139 (56.7)
Home with Rapid Response Team support	6 (5.1)	16 (12.6)	22 (9.0)
Home with social services follow-up	10 (8.5)	1 (0.8)	11 (4.5)
Community hospital	22 (18.6)	29 (22.8)	51 (20.8)
Short-stay unit or ward	1 (0.8)	4 (3.1)	5 (2.0)
Increased care package or community reablement referral	2 (1.7)	0 (0.0)	2 (0.8)

Values are presented as n (%). Global Fisher's exact test for distributional differences: $p=0.008$ (Benjamini-Hochberg adjusted). Effect size: Cramér's $V=0.26$ (moderate). Percentages are descriptive; no individual category-level hypothesis testing was performed.

were interpreted as proxy measures of assessment completeness and workflow efficiency, rather than direct measures of these constructs. Although the Mini OT CGA expanded the scope of assessment, its structured format may have reduced variability between clinicians and minimized duplication, thereby supporting more timely assessment within existing capacity constraints. However, the moderate effect size associated with this outcome indicates that capacity-related challenges were reduced but not eliminated.

Several limitations should be acknowledged. This was a single-site, retrospective pre–post service evaluation conducted in an urban hospital with established access to community-based services, including rapid response teams and community hospitals. The generalizability of findings to settings with more limited community infrastructure may therefore be restricted. In addition, the post-implementation data were collected during the COVID-19 pandemic, a period characterized by altered ED attendance patterns and system-wide operational pressures. Despite this, senior clinical leadership confirmed that OT referral criteria, staffing establishment, documentation processes and access to community pathways remained operationally unchanged across both study periods, supporting the internal validity of the comparison. However, operational consistency within the OT service does not fully account for the broader contextual effects of the pandemic on the population studied. During 2021, ED attendance patterns differed from pre-pandemic norms, with evidence nationally of reduced attendance by older adults with frailty and increased reliance on community-based alternatives to hospital care. It is plausible that patients presenting to the ED in 2021 represented a more selected group, or that heightened awareness of hospital-associated risks may have increased receptiveness to community discharge options independently of the assessment approach used. Additionally, the expansion of rapid response and virtual ward capacity during the pandemic may have facilitated higher rates of community-supported discharge in 2021 regardless of assessment quality. These factors cannot be controlled for within a retrospective pre-post design and represent a substantive limitation on the causal interpretation of the observed differences. The findings should therefore be understood as hypothesis-generating rather than conclusive.¹³

The study focused on immediate discharge outcomes and did not include longer-term follow-up. As a result, it is not possible to determine whether CGA-informed assessment was associated with reduced readmissions, improved functional recovery, or enhanced patient and carer experience following discharge. Discharge destination serves as a pragmatic proxy for decision-making quality but does not capture downstream outcomes or patient-reported measures.

Qualitative perspectives were not explored. Given that CGA is inherently person-centered, incorporating patient, carer and staff experiences in future evaluations would provide valuable insights into the acceptability, perceived usefulness and practical impact of the Mini OT CGA in ED settings. Such data could inform further refinement of the tool and guide implementation in diverse clinical contexts.

A small increase in referrals deemed inappropriate was observed following implementation. This may reflect increased visibility of OT services or heightened awareness of frailty-focused assessment among ED staff, but it may also indicate a need for clearer referral criteria or targeted education to ensure optimal use of therapy resources.

Overall, this study provides evidence that embedding a structured, OT-led geriatric assessment into ED practice can support

incremental improvements in discharge planning, care coordination and alignment of services with the complex needs of frail older adults. The findings support cautious optimism regarding the value of CGA-informed OT practice in the ED, while underscoring the importance of realistic expectations regarding the scale of achievable change in complex acute care environments.

Conclusions

This evaluation demonstrates that introducing a structured, multidomain geriatric assessment into routine OT practice within the ED was associated with incremental improvements in the identification of functional, cognitive and social needs among frail older adults. Use of the Mini OT CGA coincided with improved alignment between assessment findings and discharge planning, increased utilization of appropriate community-based services and a substantial reduction in the proportion of patients not assessed due to capacity constraints. These changes were observed without an increase in acute inpatient admission rates, suggesting that enhanced assessment did not displace clinical risk elsewhere within the system.

The observed effects were of small-to-moderate magnitude and should be interpreted as indicative of system-level refinement rather than large or transformative change. As a single-site, retrospective service evaluation conducted during a period of wider health system pressure, the findings are necessarily context-specific and should not be assumed to be directly generalizable to all ED settings.

Nevertheless, this study provides early, pragmatic evidence that embedding a structured, OT-led geriatric assessment within existing ED workflows is feasible and can support more consistent, person-centered and coordinated discharge decision-making for frail older adults. The Mini OT CGA represents a promising, context-specific approach to strengthening frailty-responsive practice within ED OT services.

Further research should explore longer-term outcomes, including functional recovery, readmission risk and patient and carer experience, and should evaluate cost-effectiveness and scalability across diverse healthcare contexts. Such work will be essential to determine the broader applicability and sustainability of structured geriatric assessment models in acute care environments.

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Ethics approval and consent to participate: this study was registered and approved as a service evaluation by the hospital's research ethics and governance committee. In accordance with NHS Health Research Authority guidelines, formal written consent was not required, as the project involved retrospective review of anonymized, routinely collected clinical data.

Informed consent: not applicable.

Patient consent for publication: not applicable.

Availability of data and materials: the datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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