Cleveland Clinic

A Scarce Resource: Cleveland Clinic's Innovative Geriatric ED Reduces Avoidable Admissions

Older adults have some of the highest rates of emergency department (ED) use in the United States. The traditional emergency department model of care, however, is not ideally suited for the complex clinical presentation and health care needs of older adults. Older adult ED patients have higher admission rates than other ages, not necessarily because of higher acuity, but often due to this higher complexity.

Meanwhile, hospitals are facing increasingly high census, with a shortage of available beds. Patients who normally would be admitted into an inpatient bed are waiting hours or even days for an available bed. This puts older adult patients at an increased risk for delirium, falls, and pressure sores, each of which can contribute to a longer length-of-stay (LOS).

Cleveland Clinic recognizes the importance of prioritizing its most vulnerable patients, and as a result has implemented the Geriatric Emergency Department (GED) model in all 13 Cleveland Clinic EDs. By focusing on getting appropriate older patients safely home and admitting only the patients with the highest acuity, Cleveland Clinic GEDs are improving efficiency during a growing demand for inpatient beds.

Why Geriatric EDs?

- Provide a **standardized** approach to care.
- **Improve** patient outcomes.
- Ensure **optimal** transitions of care.
- Make a **positive impact** on geriatric patients.

Older ED patients have higher admission rates than other age cohorts. Hospitalizations in this group have significant adverse health outcomes, including: iatrogenic complications, delirium, functional decline, and loss of independence. Hospitalizations also result in significant healthcare costs and inconsistent quality of care. The aim of the GED is to support transitioning older adults safely home, while minimizing the risk of complications to the patients that require an inpatient bed.

Cleveland Clinic Geriatric ED Priorities

- Care process geared toward high-risk older adults.
- Seamless EMR integration into all the care initiatives.
- Earliest delirium detection.
- Improve transitions of care.
- Enhanced geriatric-EM education.

Geriatric ED models of care in the United States include: a dedicated geriatric ED unit, a geriatric practitioner model, a geriatrics champion model, and a geriatric-focused observation unit. [1]

The advantages of an observation-based GED model are numerous, including: use of existing ED space and staffing, easier use of defined geriatric protocols, decreased impact on ED throughput, and additional professional billing for both observation services and geriatric consultants.

Cleveland Clinic Geriatric ED (GED) Program

What sets Cleveland Clinic Main Campus GED apart is the inclusion of a geriatric physician or APN in our Main GED observation unit. ***This model has been shown to reduce potentially avoidable admissions by 73 percent.***[2] At all Cleveland Clinic GEDs, staff is empowered to provide high-quality care to the most vulnerable older patients through defined geriatric protocols, attention to standardized delirium screening and a focus of reducing complications due to geriatric syndromes.

Cleveland Clinic is also leading innovation in practice for the care of older adults through the use of the electronic medical record (EMR) to automate screening for high-risk older ED patients.[3] Most geriatric risk screening tools (ISAR, TRST) require manual administration and EMR entry. This EMR-automated screening links to a delirium screening tool for high-risk older patients and frees nursing time to allow delirium assessment at triage. Earlier identification of delirium is yet another tactic to improve patient outcomes, while recognizing patients that are at greatest risk of harm.

Recent studies of GEDs show reduced low-value admissions and decreased Medicare expenditures[4], and reduced length-of-stay for admitted patients.[5] Our results show a significant reduction in potentially avoidable admissions when older ED patients are evaluated by the GED team.[2]

Cleveland Clinic Outcomes

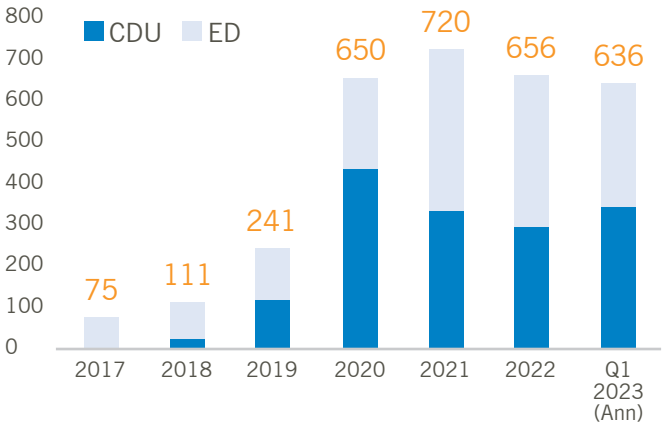
- **Feasibility of EMR-automated geriatric screening tools.**
- **Reduce avoidable admissions**: ***42 percent overall reduction in older ED patients and a 73 percent less odds of admission for older ED observation patients.***
- **Reduce length-of-stay (LOS): Geriatric evaluation and impact on hospital LOS.**

Geri eval status on admitted pt	Mean LOS
CDU + Geri eval	6.26 days
ED + Geri eval	7.28 days
ED + No Geri eval	7.30 days

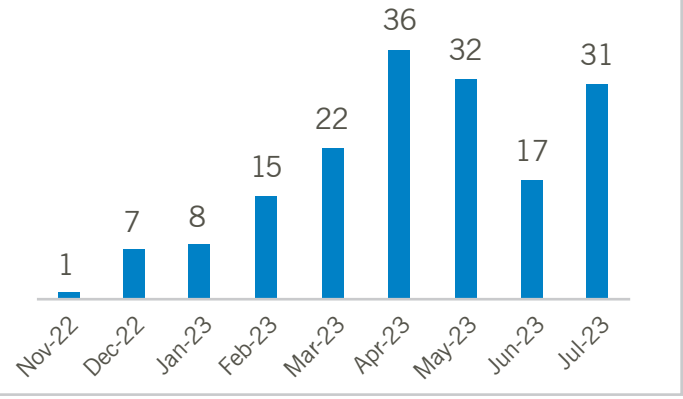
A recent analysis of GED evaluations and admission rates for 449 ACO patients placed in the GED observation unit in 2022-2023 found significant differences in hospital admission rates for those patients seen by the GED team (17percent versus 55 percent for those not evaluated by the GED team). With hospital admissions being the largest single driver of ACO costs (averaging approximately $35,000 per admission), 79 avoided admissions could potentially save over 2.8 million dollars. (unpublished data).

Although we perceive avoided hospital admissions as the key impact of the GED, additional ROI includes direct provider billing for geriatric services and increased referrals to CC geriatric outpatient clinics. ***Combined net revenue for the GED program for the last four years was approximately $15.25 million.***

Volume of Cleveland Clinic Main Campus patients assessed by geriatrician in the ED/ED Obs Unit 2017-Q1 2023



Number of referrals from Cleveland Clinic Emergency Services Institute EDs



CPT Codes	Description	RVU	$ Conversion
99222 + 99238	Moderate Complexity	2.60 + 1.50 = 4.1	$138.95
99222 + 99239	Moderate Complexity	2.60 + 2.15 = 4.75	$160.98
99223 + 99238	High Complexity	3.50 + 1.50 =5.0	$169.45
99223 + 99239	High Complexity	3.50 + 2.15 = 5.65	$191.48

2023 conversion factor= $33.89

Cleveland Clinic has instituted a GED model to provide a standardized approach to care, improve patient outcomes, ensure optimal transitions of care, and make a positive impact on these unique and vulnerable ED patients. Potentially avoidable admissions in this group can both improve direct patient outcomes and free up increasingly scarce inpatient beds, thus decreasing ED boarding and left-before-treatment-complete rates and allowing other service line use.

Cleveland Clinic ROI

- Reducing potentially avoidable admissions in older ED patients.
- Value-based cost savings from avoided admissions in our ACO patients.
- Direct clinical professional revenue generated.
- Increased outpatient referrals.

Key Takeaways

- **Decrease potentially avoidable admissions from the ED** and **LOS** for admitted geriatric patients.
- **Enhanced use of available EMR technology** and data for patient care.
- Positive impact on **delirium detection.**
- **Direct clinical revenue** and **VBC cost savings.**

References:

1. *Southerland LT, Lo AX, Biese K, et al. Concepts in Practice: Geriatric Emergency Departments. Ann Emerg Med. 2020 Feb;75(2):162-170. doi: 10.1016/j.annemergmed.2019.08.430. Epub 2019 Nov 13. PMID: 31732374; PMCID: PMC6980991*
2. *Meldon S, Saxena S, Muir M, Briskin I, Masciarelli McFarland A, Delgado F, Hashmi A. The Effect of Geriatric Consultation on Admission Rates of Older Patients in the Emergency Department. Ann Emerg Med 2020; 76:S140 and WestJEM 2024; 25:1 https://escholarship.org/uc/item/0jn486s1*
3. *Saxena S, Meldon S, Hashmi AZ, Muir M, Ruwe J. Use of the Electronic Medical Record to screen for high-risk geriatric patients in the Emergency Department. JAMIA Open, 6(2), 2023*
4. *Hwang et al. "Association of a Geriatric Emergency Department Innovation Program With Cost Outcomes Among Medicare Beneficiaries." JAMA Open. 2021 Mar 1;4(3):e2037334. doi: 10.1001/jamanetworkopen.2020.37334.*
5. *Keene et al. "Implementation of a Geriatric Emergency Medicine Assessment Team Decreases Hospital Length of Stay." AJEM. 2022 May:55:45-50. doi: 10.1016/j.ajem.2022.02.027.*

A partnership to enhance emergency care for older adults

Cleveland Clinic, in collaboration with West Health Institute, has led research and knowledge sharing on how the GED model impacts healthcare system strategy and goals. Working together, Cleveland Clinic and West Health Institute are committed to improving care for older adults by advancing the GED accreditation through the American College of Emergency Physicians, and education and training with the Geriatric Emergency Department Collaborative.

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westhealth™ institute