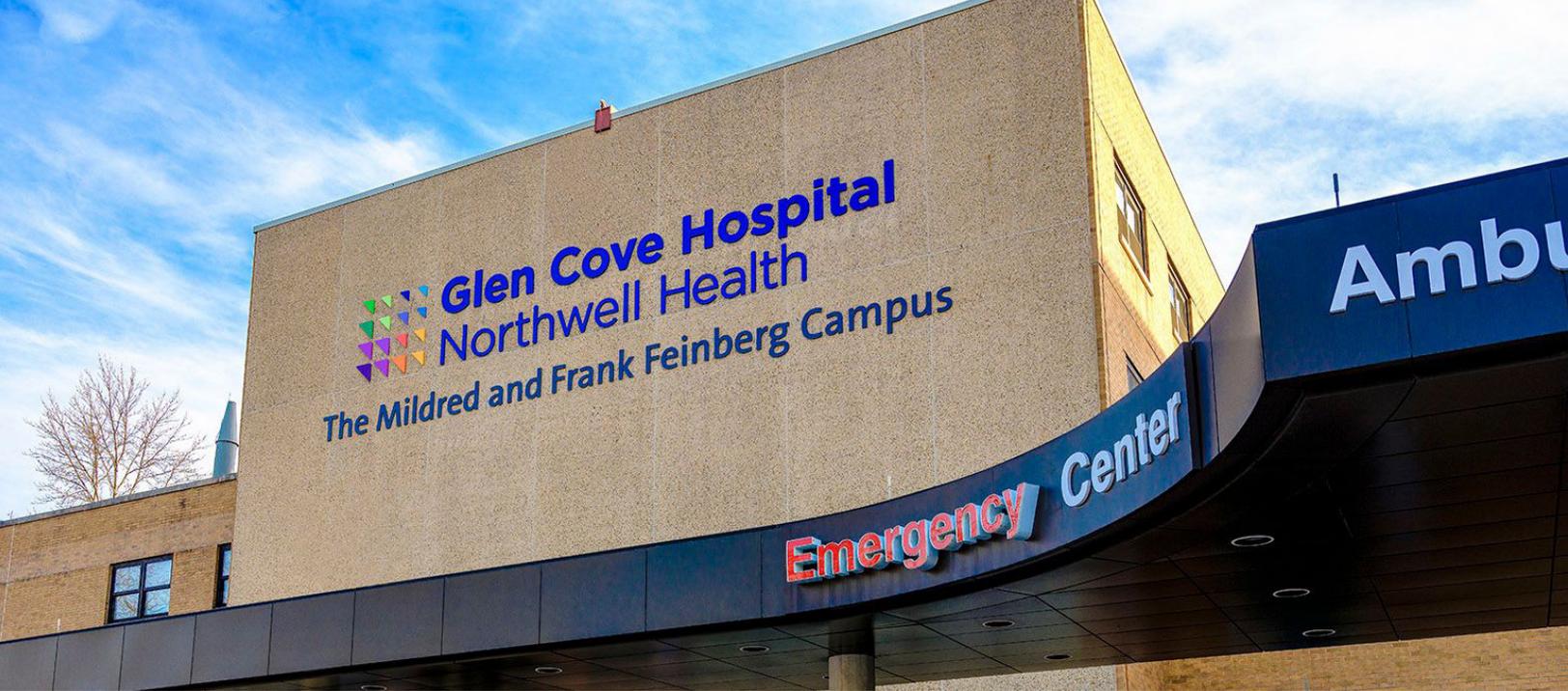




# Northwell Health GEDA Case Study

Goals of Care, Throughput,  
Clinical Outcomes



# Northwell Health®

## The Challenge

Northwell Health is New York’s largest healthcare provider with 18 emergency departments (EDs), including one pediatric ED. Each year, these 17 EDs treat more than 850,000 patients of all ages. Over 33% of these patients are age 65 and older and may have unique needs related to dementia, acute delirium, depression, chronic diseases, polypharmacy and other complex care needs. The older adult population is growing, especially in the multigenerational communities living throughout the New York Metropolitan area. With this population growth comes the necessity to ensure safe, quality care. Older adults are often the most vulnerable patients and experience longer lengths of stay, higher cost of care, increased readmission rates, and may be at highest risk during long ED wait times and boarding.

## The Goal

By caring for the older adult population as a distinctive subset, Northwell Health endeavors to improve the care that older adults are receiving and, in turn, impact their own bottom line through decreased excess days and readmissions. As a system,

Northwell is actively engaging in their chosen strategy to be age-friendly. As the front door to the hospitals, the ED teams took this as a particular challenge. Because Northwell’s 17 EDs are unique from another (different footprint, different resources, different communities), it is the singular goal of Northwell’s Emergency Medicine Service Line (EMSL) that a patient receives the same standard of care no matter where they present. The parameters that the American College of Emergency Physicians (ACEP) set through the Geriatric Emergency Department Accreditation (GEDA) helped to identify common practices with big impact across the 17 EDs.

Dr. Maria Torroella Carney, Northwell’s Chief for the Division of Geriatrics and Palliative Medicine, championed this work when she said, “When we improve the care for older adults, we improve the care for everyone. This is especially true in the fast-paced emergency department (ED) environment. The ED is the gateway into our hospitals. It all starts there.”

# Northwell Health's Clinical Team: Advocates for Older Adults

Dr. Teresa Amato is the Director of Geriatric Emergency Medicine for Northwell Health. Her dedication to improving care for older adults in the ED began as a teenager, watching her grandmother receive care in the emergency department for chest pain. Teresa recalls watching hopelessly as her grandmother was both sedated and restrained from acute onset of delirium, most likely brought on by a long wait in an overstimulating emergency department. Only at the end of the visit, when Dr. Amato and her family requested an EKG, did they discover that her grandmother's chest pain was caused by an acute myocardial infarction (heart attack). Watching and listening to her grandmother suffer, while not receiving the clinical care that she needed, had an impact on Dr. Amato that drives her commitment to improve geriatric emergency care.

By embarking on a system-wide geriatric emergency department accreditation process through the American College of Emergency Physicians, Northwell Health is now a leading resource for older adults seeking emergency care throughout the New York region. Caring for older adults is part of the fabric of Northwell Health, demonstrated by a clinician-led and system-wide geriatric emergency care program.

## Execution

In April of 2020, Dr. Amato and the physicians working in Northwell's EDs could not easily speak with patient families. Bedside visitors could not stay with loved ones in the ED due to the risks of COVID-19. In response, Northwell's Geriatric Emergency Medicine (GEM) Committee created a Remote Goals of Care (GOC) program. A GOC conversation is a conversation, typically between provider and patient (likely with caregivers present) to understand the patient's goals, preferences, and values so that [the provider] can help to guide them on how decisions for specific interventions will or will not align with these expressed goals (Dunlay and Jacob, 2016, p37).<sup>1</sup>

Northwell's COVID response utilized nurses who were unable to work in their clinical settings to have these GOC conversations by connecting family at home and patient in the ED. The nurses, when triggered by physicians in the ED, would speak with family members—and whenever possible, the patient—to determine how the clinical team should proceed if life-saving measures were needed. The program was used for 64 patients in those early weeks of the pandemic for patients of all ages: 34% of patients completed a new health proxy form and 20% discussed hospice services.

When the need for COVID-related GOC conversations receded, one ED decided to retain the practice for their older adult population. The ED at Glen Cove Hospital views the first hour of care for the elderly patient as the golden hour of treatment, akin to the impactful golden hour of trauma care, well known to emergency clinicians.

Having these conversations early allows clinicians to focus on truly what matters most to patients and their caregivers, thereby improving comfort and patient experience. Additionally, early use of these GOC discussions has an additional host of benefits to patients and the health system, including shorter inpatient length of stay, reduced 30-day readmission rate, and decreased healthcare costs. One study looking at ED-initiated goals of care discussions showed a decrease in length of stay by three days and savings in cost of almost \$10,000 per patient.<sup>2</sup>

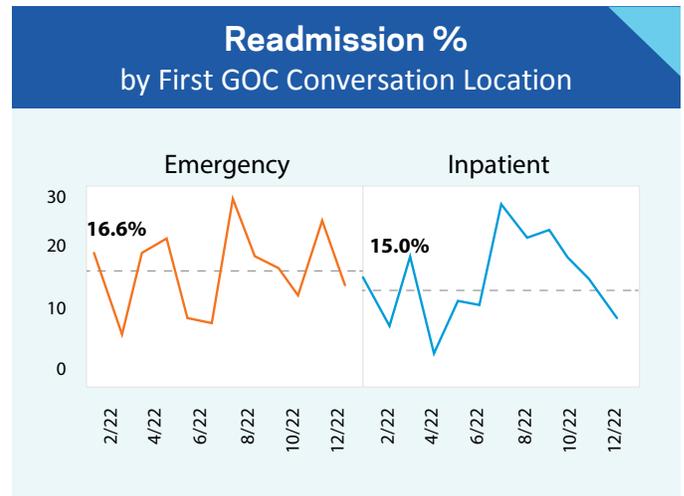
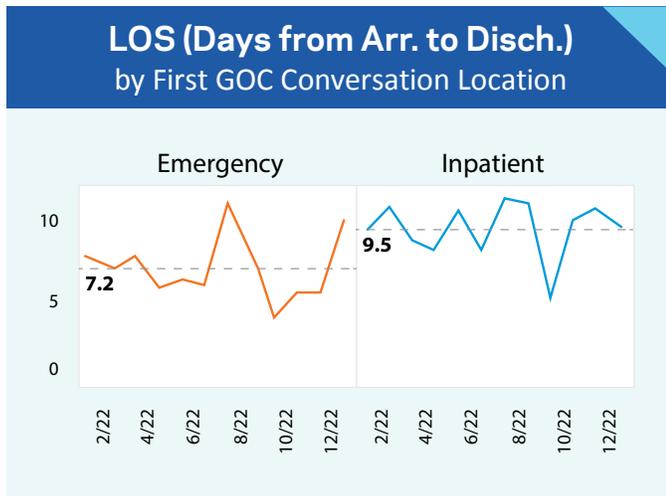
## GOC at Glen Cove Hospital

In 2022, 48% of elderly patients arriving to the Glen Cove ED have documented GOC conversations (Northwell = 21%), the majority of these conversations (58%) in Glen Cove Hospital are occurring in the ED, compared with the health system average of 32%. Most importantly, 24% of GOC conversations are occurring within the first hour after presentation to the ED at Glen Cove, compared with the Northwell average of 6% within the first hour (see Graph 1).

1. Dunlay, S. M., & Strand, J. J. (2016). How to discuss goals of care with patients. *Trends in cardiovascular medicine*, 26(1), 36–43. <https://doi.org/10.1016/j.tcm.2015.03.018>

2. Fermia R, Wilkins C, Rodriguez D, Read KB, Gavin N, Caspers C, Jamin C. COST SAVINGS AND PALLIATIVE CARE REFERRALS FROM THE EMERGENCY DEPARTMENT. *Physician Leadersh J*. 2016 Oct;3(5):8-11. PMID: 30571866. Dunlay, Shannon M., and Jacob J. Strand. "How to Discuss Goals of Care with Patients." *Trends in Cardiovascular Medicine*, vol. 26, no. 1, 2016, pp. 36–43, <https://doi.org/10.1016/j.tcm.2015.03.018>.

Graph 1



## A Nurturing Environment for Program Development

The Remote GOC program went live within seven days of the initial request and Glen Cove’s adoption of the GOC conversation in the ED was supported smoothly by health system IT resources and technology. To do this work so readily required buy-in from Northwell’s leadership. Northwell’s GEM Committee’s existing infrastructure was the machine behind this critical work.

In 2018, the EMSL began its journey to age-friendly care by applying for GEDA. The EMSL is a central team that links all 17 EDs for operational purposes, including finance, staffing, clinical operations, data management, administration, and quality.

Dr. Amato, the EMSL’s two-person development team, and a geriatrician from Dr. Carney’s team were assembled to determine the best way to achieve universal accreditation. Quickly, they became the Geriatric Emergency Medicine (GEM) leadership team.

## The Journey to Accreditation

The GEM leaders spoke with the ED leaders from every department, both clinical and administrative. Across the board, these leaders enthusiastically supported the initiative to earn Level 3 accreditation. Conversations with hospital leaders had a similar outcome: where the clinical leaders were willing to contribute their clinical expertise, administrative leaders were willing to partake in the financial burden. Relying on the EMSL’s strong relationships

with its 17 EDs, as well as IT and administrative departments, the GEM team submitted all 17 applications six months after their first meeting.

This support comes from the top. Northwell senior leaders, including CEO Michael Dowling support universal GEDA saying, “Caring for our elders is an honor that Northwell takes seriously. By developing an age-friendly strategy and earning the American College of Emergency Physicians (ACEP)’s Geriatric ED Accreditation (GEDA), we are displaying to our community that Northwell is committed to the care of older adults. We are proud that Northwell was the first health system in the country to earn universal accreditation.”

Throughout this process, the GEDA board acted as partners by providing support and guidance on identifying quality improvements that would bring the most value to these vulnerable patients. In 2019 Northwell Health became the first multisite health system in the country to earn Geriatric Emergency Department Accreditation, an important waypoint in Northwell’s journey to be an age-friendly healthcare organization.

## Beyond Accreditation

Achieving universal GEDA was not the singular goal of the GEM leaders. Because older adult care is part of the fabric of Northwell’s care model, they endeavored to preserve the discourse they started within the EM quality landscape. They established the GEM Committee to recognize the needs of older adults and ensure sustainability of the changes implemented during the accreditation process. In doing so, they ensured the focus on older adults in the

emergency department would be a natural process of care delivery at Northwell.

Five years later, the GEM Committee meets quarterly, with over 30 ED-based champions with clinical and non-clinical roles. Using the Institute for Healthcare Improvement’s 4Ms Framework (what matters, medication, mentation, and mobility), as the guiding philosophy, Dr. Amato and the GEM leaders set a theme for each meeting and invite relevant guest speakers from within and outside of the Northwell community to share their expertise.

GEM has chosen to provide continued focus and energy around these topics that impact older adults:

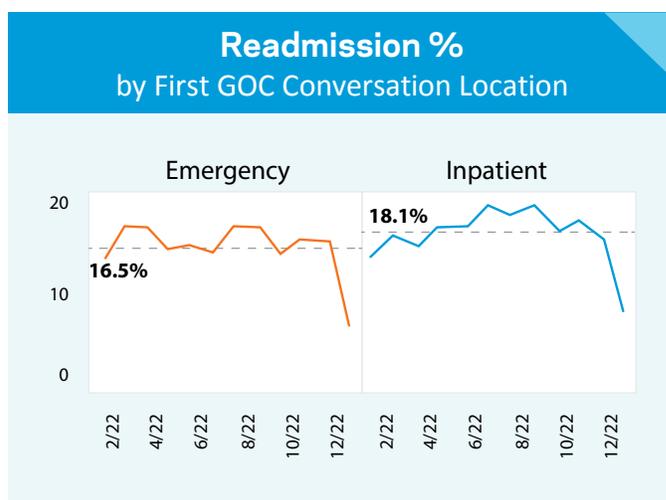
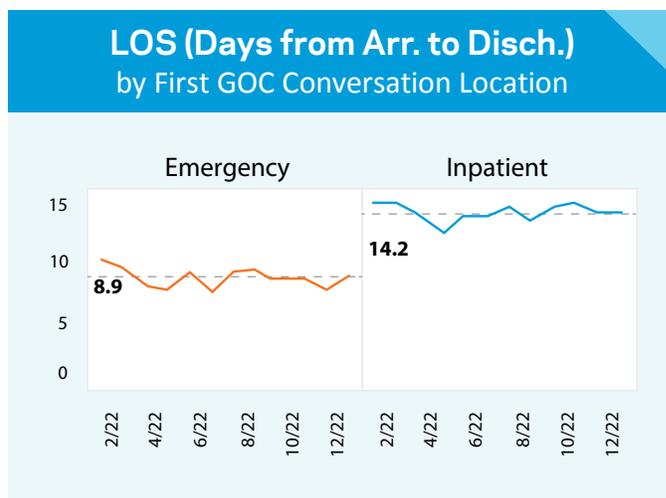
- The feeding and nutrition of older adults in the ED
- How to have a Goals of Care Conversation in the ED
- Identifying and addressing elder abuse
- Interdisciplinary discharge planning
- Applying the 4Ms to nursing care and the NICHE certification
- How to include care givers in the conversation

Seeing the value of GEDA, EDs have decided to offer even more specialized geriatric services and have applied to move up to the next level of care and accreditation. In 2021, Glen Cove Hospital’s ED became the first community ED in New York State to hold an ACEP GEDA Level 1 accreditation and is currently the only ED in New York State with this designation. The Glen Cove leadership in partnership with GEM, built a suite of older adult-focused data dashboards to collect and track demographic information, as well as key elements of the GEDA Level 1 requirements.

## Goals of Care and Disseminating Best Practice

Through GEM’s regular learning series, Glen Cove ED’s best practices were disseminated to Northwell’s 16 other EDs. The impact was significant: patients who received a GOC conversation in the ED shortened their stays in the ED by more than five days compared to those who received a GOC conversation in the inpatient setting (see Graph 2).

**Graph 2**



For those patients who participated in a GOC conversation in the ED, Northwell evaluated the top three primary diagnoses: patients with respiratory infections and inflammations, heart failure and shock, and septicemia or severe sepsis. All three diagnoses are highly acute conditions often accompanied by comorbid and major comorbid conditions and lengthy hospital stays (see Table 1). Although it is recognized that there are many factors that affect length of stay, the data supports that ED-initiated GOC conversations contributed to meaningful length of stay reductions.

**Table 1: LOS Analysis Top 3 DRGs by Location of GOC Conversation  
Jan-Dec 2022 All Northwell EDs**

DRG	Description	N (number of patients with ED conversations)	LOS Inpatient Conversation	LOS ED Conversation	Savings
177	Respiratory Infections and Inflammation <b>With MCC</b>	581	11.60	9.60	348,600.00
177,178,179	Respiratory Infections and Inflammation <b>With MCC</b>	633	11.2	9.2	379,800.00

DRG	Description	N (number of patients with ED conversations)	LOS Inpatient Conversation	LOS ED Conversation	Savings
177	Heart Failure & Shock <b>With MCC</b>	471	10.9	8.0	409,770.00
177,178,179	Heart Failure & Shock <b>With and without CC/MCC</b>	478	10.9	8.0	415,860.00

DRG	Description	N (number of patients with ED conversations)	LOS Inpatient Conversation	LOS ED Conversation	Savings
871	Septicemia or Severe Sepsis w/o MV>96 h <b>With MCC</b>	1335	12.9	9.8	1,241,550.00
871,872	Septicemia or Severe Sepsis w/o MV>96 h <b>With and without CC/MCC</b>	1444	12.6	9.6	1,299,600.00

Just as Glen Cove's experience showed, the greatest impact can be made on patients who have a GOC conversation earlier in their care. Over one third of GOC conversations are now happening in the ED throughout Northwell.

## Lessons Learned

1. Appreciate, celebrate, and focus on the smallest divergences in practice. By completing the GEDA applications, the GEM leaders recognized that applying clinical standards and protocols looked the same at each ED from a “bird’s eye view,” but from “the ground” there were valuable differences occurring in each facility in large part due to the space and relationships that govern the department in its ecosystem.
2. Big impact is not limited to financial investment. The majority of Northwell’s investment focused on the time of existing team members: project management, champion education, IT builds, and leadership.
3. Culture change is just as important as facility updates. Only one ED, Glen Cove, made structural

changes to their department. Those changes were minimal given the existing ED floorplan. What Glen Cove experienced was the challenge of culture change. Each time GEM meets to share new recommendations and best practices with the ED champions, they focus not only on how to achieve the process change, but how to facilitate adoption and prepare for the reactions impacted of staff members.

## Summary

With a small investment in time, Northwell and GEM successfully ensured better care for older adults in every Northwell ED, saved the health system money, and permanently impacted the culture of care for older adults in the New York metro area.



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