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Frailty, Function, and Failing Hearts: My Journey in Optimizing Heart Failure in the Nursing Home

By Nestor Flores Buonomo, MD



When I began my geriatric medicine fellowship at the Long Island State Veterans Home at Stony Brook (LISVH), I came armed with a solid foundation in internal medicine, three years of residency, countless hospital admissions, and the muscle memory of initiating guideline-directed medical therapy (GDMT) for heart failure.

But what I lacked was any formal training in nursing home medicine. Like many internists, my experience with frail, elderly residents only extended to the community setting (primary care visits) or the hospital. I assumed optimizing heart failure would be straightforward: identify the diagnosis, prescribe the four pillars of GDMT, titrate to target doses, and watch outcomes improve. One of the greatest lessons I learned in fellowship was seeing in real time how wrong I was.

Heart failure affects 15 to 45% of nursing home residents, dramatically higher than the 6 to 10% prevalence in the general population of older adults. The annual hospitalization rate is 52%, and the mortality rate hovers around 46%. These are staggering numbers. Yet despite having ACC/AHA and ESC¹ guidelines that recommend aggressive four-pillar therapy for heart failure with reduced ejection fraction (HFrEF) — ACE inhibitors or ARNIs, beta-blockers, mineralocorticoid receptor antagonists, and SGLT2 inhibitors — there are no guidelines specifically tailored for the nursing home population.

In fact, these guidelines do not even extend to geriatric patients in the community with comorbidities despite these patients being the most likely to benefit from these guidelines. There is no roadmap for how to apply evidence-based protocols to an 85-year-old woman with moderate dementia, chronic kidney disease stage 4, a history of recurrent falls, and a documented wish to prioritize comfort over longevity.

The Sobering Reality

My education began at the LISVH. I started what I called my quality improvement project, though in truth it was as much about my own learning as it was about improving care. I set out to audit every resident

with a diagnosis of heart failure or who was taking a diuretic. Out of 320 residents in our 350-bed facility, I initially identified 103 charts that would make good candidates for optimizing GDMT.

What I found was both illuminating and humbling. Among those 103 residents, 25 had no documented diagnosis of heart failure at all, despite being on diuretics or other HF-related medications. Of the 78 who had confirmed diagnoses — 21 with HFrEF and 57 with heart failure with preserved ejection fraction (HFpEF) — not a single resident was on all four pillars of GDMT. Not one. The numbers told the story: 27 residents on beta-blockers, 14 on MRAs, 14 on SGLT2 inhibitors, and 17 on an ACE inhibitor, ARB, or ARNI. Medication optimization was not the norm; it was the exception.

But the numbers that struck me hardest were these: Of the 78 residents with confirmed heart failure, 45 — more than half — met at least one high-risk criterion that made aggressive GDMT potentially dangerous. Twenty-five had fallen in the past year. Nine had an eGFR less than 35. Nine had documented orthostatic hypotension. Three were on hospice. Four had a history of hyperkalemia.

These were not abstract data points. These were real people, each with their own stories, their own fears, and their own definitions of what a good life looked like. And suddenly, the question was not simply "Are we following guidelines?" but rather "Should we?"

The Delicate Balance

During my residency, I had been trained to think of heart failure medications as life-saving. And they are. Beta-blockers reduce mortality. ACE inhibitors slow cardiac remodeling. SGLT2 inhibitors decrease hospitalizations. The evidence is robust. We were taught the teachings of MERIT-HF², PARADIGM-HF³, TOPCAT⁴, and EMPEROR⁵ to the point that we could recite these trials by memory. But in the nursing home, I quickly learned that these same medications carry risks that can be devastating in a frail, older population.

Diuretics, which are essential for symptom control, can cause volume depletion, orthostatic hypotension, and falls. Each fall increases the risk of hip fracture, subdural hematoma, and a cascade of functional decline. Beta-blockers can cause bradycardia and fatigue, making residents more sedentary and increasing their fall risk. ACE inhibitors can worsen kidney function and cause dangerous hyperkalemia. It seemed like these adverse effects were a matter of if, not when, it came to the residents of LISVH.

Every medication decision became a high-wire act. I was constantly asking myself: Am I helping this person live longer, or am I simply increasing their risk of injury and suffering? Is a 30% reduction in mortality worth it if the time-to-benefit is 3 to 6 months and the resident's life expectancy is roughly around 3 years? What about if they have moderate dementia and cannot articulate symptoms of dizziness or fatigue? What if their functionality is already compromised and they need assistance with their ADLs? What does increasing their life expectancy even look like? Is that what the patient and the family would want for them?

The question banks did not prepare me for these questions. Neither did my training. I found myself leaning heavily on my mentors, nurses, and most of all, the resident's families. Where the guidelines and the evidence lacked, they made up for in clarity. More often than not, I would openly and clearly express

the risks and benefits of optimizing GDMT in these patients. Sometimes saying “I’m not sure if this is the right decision but this is what we can expect” has been an exercise in humility and clarity that has helped me grow closer with the patients and their families.

What the Data Taught Me

My QAPI project was not just an academic exercise. It fundamentally changed how I practice medicine. The data showed me that "optimal" therapy in a nursing home looks very different from optimal therapy in the community. The goal is not always to maximize GDMT; sometimes it is to maximize quality of life while minimizing harm.

I learned to assess frailty systematically, not just by gestalt. I learned to have goals-of-care conversations early and often, not waiting until a crisis forced the discussion. I learned that deprescribing is as much a clinical skill as prescribing, and that sometimes the most courageous thing a doctor can do is stop a medication, even if the guidelines say it should be continued.

I also learned about the power of multidisciplinary care. The clinical pharmacist who reviewed medication interactions and renal dosing. The physical therapist who assessed fall risk and worked on strength training. The dietitian who helped residents manage fluid restrictions without making every meal a source of stress. The social worker who helped families navigate difficult decisions. No single provider could manage these complex patients alone.

The Art of Individualization

What I have come to realize is that nursing home medicine is inherently an exercise in individualization. There is no one-size-fits-all approach. A 78-year-old veteran with HFREF, good functional status, and intact cognition who wants to live as long as possible? Yes, I should be aggressive with GDMT. But an 89-year-old woman with advanced dementia, severe orthostatic hypotension, and a history of multiple falls? In her case, comfort and safety take precedence. These are easy examples of a mental spectrum I hold when optimizing someone’s GDMT. How much am I willing to risk adverse effects, hospitalizations, falls, and electrolyte abnormalities for the sake of reduced mortality? Each resident comes with their own story, belief system, and goal, and I try to reflect my approach in accordance with their goals as well as what can provide the greatest benefit with the least amount of harm.

This requires a different kind of clinical judgment; one that balances evidence with experience, guidelines with goals, and protocols with pragmatism. It requires humility to admit that pushing for guideline adherence might do more harm than good. It requires courage to explain to a consultant that, no, we are not going to add another medication to a resident already taking 15 pills a day. Especially when large cohort studies and meta-analyses demonstrate that patients taking five or more medications have a 21% higher fall rate when compared to those taking less. And it requires constant vigilance, because the clinical picture in the nursing home can change rapidly.

Lessons in Humility

I came into fellowship thinking I knew how to manage heart failure. What I have learned is that I knew how to manage heart failure in the hospital. The nursing home is an entirely different world; one that demands a different skillset, a different mindset, and a different kind of humility.

I have learned to listen more than I talk. To observe more than I intervene. To recognize that the families can provide a perspective that may be invaluable when it comes to their care. I have learned that sometimes the best medical decision is to do less, not more.

Most importantly, I have learned that every resident is a person first. Not a diagnosis, not a set of guidelines, not a quality metric. They have lived full lives. They have preferences, values, and fears. My job is not to impose my version of "optimal" care on them; my job is to help them live as well as possible, for as long as possible, in a way that honors who they are and what they want.

Moving Forward

The findings from my QAPI project have led to tangible changes at LISVH. We have developed facility-specific protocols for heart failure management that incorporate frailty assessment and fall risk screening. We have created educational materials for staff to help them recognize early signs of decompensation. And perhaps most importantly, we have started having more systematic goals-of-care conversations with residents and families early in their stay, so that treatment decisions can be aligned with their values.

But the work is far from over. We need more research on heart failure management in frail, elderly populations. We need clinical trials that include nursing home residents, not just community-dwelling adults. We need guidelines that acknowledge the complexity of balancing longevity with quality of life. And we need training for physicians like me — residents and fellows who will care for this vulnerable population, but who have never set foot in a nursing home during their training.

Heart failure in the nursing home is not just a clinical challenge; it is a philosophical one. It forces us to confront fundamental questions about what medicine is for, what constitutes good care, and how we define success when a cure is not possible. There are no easy answers. But I am grateful for the opportunity to wrestle with these questions, to learn from my patients and colleagues, and to become a better physician in the process.

As I finish my fellowship year, I realize that my education in nursing home medicine has only just begun. Every resident teaches me something new. Every family meeting challenges my assumptions. Every medication decision reminds me of the profound responsibility I carry. I entered fellowship thinking I was there to teach and to optimize. Instead, I have been taught and humbled. And for that, I am deeply grateful.

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Dr. Nestor Flores Buonomo is a fourth-year geriatric medicine fellow at Stony Brook University Hospital.

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