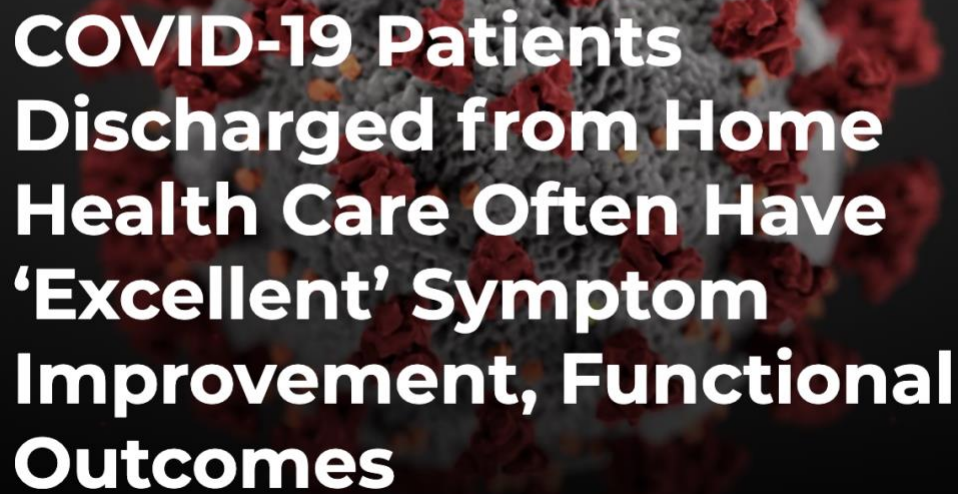


HOME HEALTH CARE



COVID-19 Patients Discharged from Home Health Care Often Have ‘Excellent’ Symptom Improvement, Functional Outcomes

By **Robert Holly** | November 23, 2020

So far, there’s been a lack of information on the characteristics and outcomes of patients hospitalized with COVID-19 who are discharged to the home setting. Researchers Kathryn Bowles and Margaret McDonald — both with the Visiting Nurse Service of New York (VNSNY) — are working to change that.

For the past few months, Bowles and McDonald have been analyzing OASIS data and other information tied to hundreds of patients recovering at home following coronavirus-related acute care stays. The goal of their analysis, Bowles told Home Health Care News, is to showcase the value of in-home care at a time when new infections are skyrocketing and hospital beds are in short supply.

Only one in 10 patients hospitalized with COVID-19 are discharged home with home health services, according to the U.S. Centers for Medicare & Medicaid Services (CMS).

“We knew that, nationwide, only 11% of [hospital discharges] are getting home health care services after COVID-19 — and that seems really low to us,” said Bowles, who serves as vice president and director of the VNSNY Center for Home Care Policy & Research. “We were hoping that we might show the value of home health care, bringing attention to the fact that home health care is a resource that could be used to help support recovery in the community.”

On top of her role at VNSNY, Bowles is a professor and the van Ameringen chair in nursing excellence at the University of Pennsylvania School of Nursing. McDonald, the associate director of VNSNY’s policy and research hub, echoed those sentiments.

The researchers’ findings on COVID-19 patient characteristics and outcomes were [officially published in the Annals of Internal Medicine](#) on Monday.

“We’re continuing to face this [emergency] and the hospitalizations are now going back up,” McDonald said. “I’m really happy this is being released at this point.”

‘They were very sick’

Bowles and McDonald have helped turn VNSNY’s Center for Home Care Policy & Research into [a well-known research powerhouse](#), one that has spent millions of dollars on dozens of groundbreaking projects focused on in-home care over the past three decades.

Like most of their past work, their newly published look at COVID-19 in the home setting leverages VNSNY’s vast data infrastructure and position as the nation’s largest nonprofit home-based care organization. Focusing their COVID-19 analysis on the New York-based VNSNY was particularly insightful, considering New York City and the surrounding area once stood as the pandemic’s global epicenter.

New York reported its first confirmed COVID-19 case on March 1. Since then, the state has had more than 601,000 total cases, including more than 33,000 deaths.

“Given that we were located in the epicenter of the pandemic and with the largest, not-for-profit home care agency in the country, we knew we had access to terrific data on patients coming out of the hospitals,” Bowles said.

As part of their latest project, Bowles and McDonald conducted a retrospective, observational cohort study, analyzing medical information from 1,409 COVID-19 patients admitted to VNSNY’s home health services between April 1 and June 15 following a hospitalization. Referrals came from 64 hospitals, with the average age of patients being 67 — much younger than the typical Medicare home health patient.

In fact, about 43% of the patients were younger than 65. The somewhat surprising age of patients was likely linked to COVID-19 devastating impact on older populations, McDonald noted.

“We do think the influence was that, you know, we were meeting with hospital survivors,” she said. “And unfortunately, the oldest of the ‘older population’ were not surviving [hospital stays], especially in the early times.”

Upon being admitted to home health services, the bulk of patients had multiple comorbidities and risk factors for re-hospitalization, such as difficulty adhering to medical instructions or exhaustion on admission. The most common comorbid conditions were hypertension, diabetes and chronic pulmonary disease.

Pain was present daily or all the time for 42% of the patients Bowles and McDonald looked at, with 84% reporting trouble breathing with any exertion and 50% reporting symptoms of anxiety. The vast majority of the 1,409 patients had severe functional limitations, with 85% needing help with four or more activities of daily living (ADLs).

“They were very sick when they entered home health care,” Bowles said.

That changed in a remarkable way after in-home services were delivered.

After an average of 32 days of care, 94% of patients with COVID-19 referred to home health care were discharged off services. Exactly 1,241 patients — or 88% of the overall sample — were discharged without any adverse health events, such as re-hospitalization or death.

In contrast to the poor symptom and functional profile of patients at home health admission, by the time of discharge, most patients had “statistically significant improvements” in pain, ability to breathe, cognition and anxiety. Functional gains were common with most patients, too, Bowles and McDonald noted.

“I was happily surprised about the recovery, which took place in a relatively short period of time,” McDonald said. “After 30 or 32 days, we were able to see that people were recovering.”

The value of home health care

Moving forward, Bowles and McDonald said they hoped home health agencies could use their findings to better prepare for delivering care for COVID-19 patients in the community.

One key takeaway they flagged is how similar COVID-19 patients are to sepsis survivors.

“Admission characteristics of COVID-19 survivors are very similar to those of sepsis survivors admitted to HHC (home health care) nationally,” their research in *Annals of Internal Medicine* states. “Recent evidence suggests that early home health visits, coupled with outpatient follow-up in Week 1, decreased re-hospitalizations among sepsis survivors.”

Another takeaway from their research was the balance of in-person visits to telephonic and video visits.

In total, the 1,409 patients cared for in the home received 13,926 home health visits. More than 75% of those visits were carried out in person, with 16% and 8% being conducted by telephone and video, respectively.

“[The care team] valued the in-person visits, and they continued to make use of them as much as they possibly could,” Bowles said. “And they were allowed into the home by the patients.”

Registered nurses provided 52% of the visits, with physical therapists providing 37% of visits. The remainder were provided by social workers, plus occupational and speech therapists. Patients received an average of 11 visits.

In addition to home health agencies, Bowles and McDonald said they hoped the health system at large will use their findings to continue shifting care into the home whenever possible.

“A key recommendation to prepare for post-acute care surges due to COVID-19 was to expand HHC use to provide skilled nursing and rehabilitative services in the home, thereby preventing transmission to other patients, as may occur in in-patient facilities,” they wrote. “This advice was prescient, because our study shows that COVID-19 survivors discharged from HHC had excellent symptom improvement and functional outcomes, highlighting that post-acute support through HHC affords an opportunity to aid the recovery of future patients with COVID-19.”