Use Case 2 Early Supported Discharge for Improving Functional Outcomes After Stroke

Funder: Year Awarded: 2015 Project Period: 63 months

We are planning a randomized trial of 50 North Carolina hospitals, in partnership with the North Carolina Stroke Care Collaborative (NCSCC) registry, to compare approaches to care for stroke patients. We are asking whether Comprehensive Post-Acute Stroke Services (COMPASS), which combines transitional care and early supported discharge for stroke patients who go home directly from the hospital, improves patients' daily function compared with usual care. We will also consider caregiver strain, hospital readmission rates, and mortality, use of health care, consistency of physician care, use of transitional care services, and death. We will also compare outcomes in some subgroups (race, sex, age, stroke severity, and insured versus uninsured).

Participating hospitals will be assigned randomly to receive COMPASS or usual care. Phase 1 compares COMPASS with usual care. In Phase 2, the usual-care hospitals will also receive COMPASS, while the other hospitals continue the intervention. In addition to COMPASS, which combines Medicare-approved transitional care services from advanced practice providers (APPs; nurse practitioners or physician assistants) and early supported discharge services coordinated by the APPs, our intervention includes a community coordinator, who will work with local organizations to improve services for stroke survivors and their caregivers, and a stroke scorecard report, so hospital and primary care providers can see how they are doing in improving care for patients after a stroke. Together with the patient and caregiver, the APPs will develop an individualized care plan for each patient. Trained post-acute-care coordinators will help organize community groups to improve and continue care for recovering stroke patients.

We will assess 90-day and 1-year health outcomes. The primary outcome of our study is function as reported by the patients. Secondary outcomes at 90 days include caregiver stress, all-cause readmissions 30 and 90 days after discharge (assessed via insurance data), cognitive status, taking medicines as needed, blood pressure control, depression, continuity of care, and use of community resources. One year after stroke, outcomes will include death, recurrent stroke, utilization of transitional care management billing codes, proportion of patients re-hospitalized within 7 or 14 days after their first stroke hospitalization, physician follow-up, and use of health care.

Our Patient and Stakeholder Engagement Committee will work with our community coalitions to advise and support the implementation of COMPASS, provide feedback to the researchers, and recommend ways to continue COMPASS in the future. These coalitions will help us tell others about the COMPASS results and (if merited) how to begin similar programs across the United States to improve life for stroke survivors and their caregivers.