Telehealth After Stroke Care Pilot Randomized Trial of Home Blood Pressure Telemonitoring in an Underserved Setting

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BACKGROUND: Hypertension is the most important modifiable stroke risk factor, but blood pressure (BP) remains poorly controlled after stroke, especially among Black and Hispanic patients. We tested the feasibility of TASC (Telehealth After Stroke Care), a post-acute stroke care model integrating nurse-supported home BP telemonitoring, tailored infographics, and multidisciplinary team video visits.

METHODS: Acute stroke patients with hypertension were randomized at discharge to usual care or usual care with TASC. Usual care patients received video visits with primary care and stroke. TASC included a tablet and monitor to wirelessly transmit BP data to the electronic health record, with telenursing support, tailored infographics to explain BP readings, and pharmacist visits. Outcomes assessment was blinded. Feasibility outcomes included recruitment, randomization, adherence, and retention. Systolic BP from baseline to 3 months after discharge was evaluated using generalized linear modeling.

RESULTS: Fifty patients (64±14 years; 36% women, 44% Hispanic, 32% Black, 54% ≤ high school education, 30% private insurance), and 75% of all eligible were enrolled over 6.3 months. Baseline systolic BP was similar in both (TASC n=25, 140±19 mm Hg; usual care n=25, 142±19 mm Hg). At 3 months, adherence to video visits (91% versus 75%, P=0.14) and retention (84% versus 64%, P=0.11) were higher with TASC. Home systolic BP declined by 16±19 mm Hg from baseline in TASC and increased by 3±24 mm Hg in usual care (P=0.01). Among Black patients, systolic BP control (<130 mm Hg) improved from 40% to 100% with TASC versus 14% to 29%, and among Hispanic patients, from 23% to 62% with TASC, versus 33% to 17% in usual care.

CONCLUSIONS: Enhancing post-acute stroke care with home BP telemonitoring is feasible to improve hypertension in an underserved setting and should be tested in a definitive randomized clinical trial.

REGISTRATION: URL: https://www.clinicaltrials.gov; Unique identifier: NCT04640519.

GRAPHIC ABSTRACT: A graphic abstract is available for this article.

Key Words: disparities ■ hypertension ■ multidisciplinary ■ self-efficacy ■ stroke ■ telehealth
Hypertension is the most important risk factor for stroke. Small reductions (5 mm Hg) in systolic blood pressure (SBP) after stroke are associated with a greater than 20% reduction in recurrent stroke risk. However, hypertension remains poorly controlled after incident stroke in up to 55% of survivors. Patient factors including Black and Hispanic race/ethnicity, lower socioeconomic status, and low health literacy have been associated with poor BP control. Up to a third of stroke patients report poor adherence to antihypertensive medications. Furthermore, Black and Hispanic stroke patients have less access to care and medications compared to White patients with differences in health insurance coverage. These factors are amplified in underserved settings with increased workload from life demands, and reduced capacity poststroke due to physical and mental disabilities that affect access, utilization, and self-management when considering the Cumulative Complexity Model.

Multi-faceted interventions that seek to improve post-stroke BP control, expand access to poststroke care, reduce therapeutic inertia of clinicians, and improve patient self-efficacy for hypertension management are needed to effectively address these disparities. As visually communicated health information, tailored infographics can make medical information more accessible among patients with varying levels of health literacy and enhance patients' decision-making capabilities. The scientific premise is that building knowledge can lead to improvement in patient-reported outcomes. Telemedicine has gained a role in access to care since the pandemic ensued, but apparent disparities among vulnerable populations need to be addressed to provide equitable care. BP telemonitoring has shown promise in reducing BP and integrated team-based care through multidisciplinary collaborations among nursing, pharmacy, and physicians has been shown to be most potent approach in the general population. More recently, community-based efforts have addressed disparities among Black and Hispanic patients with home BP telemonitoring and nurse care management.

In post-acute stroke care, home BP monitoring with tailored infographics and multidisciplinary telehealth visits inclusive of pharmacists have not been studied in healthcare systems serving urban underserved communities. We developed a multidisciplinary team-based model including nursing, pharmacy, and physicians (TASC [Telehealth After Stroke Care], integrated with home BP monitoring (HBPM) and BP education in the form of patient-tailored visual information. Our goal was to establish feasibility of the intervention, in empowering self-management by providing accessible integrated services, equipment, and educational materials.

**METHODS**

The data that support the findings of this study are available from the corresponding author upon reasonable request per the journal's Transparency and Openness Promotion Guidelines. The study protocol was published and registered at ClinicalTrials.gov after Institutional Review Board (IRB-AAAT2612) approval. All patients provided written informed consent. The study is reported against CONSORT (Consolidated Standards of Reporting Trials) guidelines (Supplemental Material).

**Trial Design**

TASC is a parallel 2-armed pilot randomized clinical trial comparing the TASC intervention plus usual care versus usual care, alone (Figure 1; Figure S1).

**Patient Population: Inclusion and Exclusion Criteria**

Patients were enrolled from the Columbia University Irving Medical Center (CUIMC) Comprehensive Stroke Center in Northern Manhattan that serves a majority of Hispanic low-income community. Eligible patients included those with an acute ischemic or hemorrhagic stroke discharged home after hospitalization with a diagnosis of hypertension and ability to provide consent. Exclusion criteria included severe disability, pregnancy, severe psychiatric illness, dialysis, or long-term BP goal ≥140/90.

**Recruitment Methods**

Treating providers approached potentially eligible patients for participation in research. After confirming eligibility, research coordinators approached consecutive patients for enrollment in the trial. To ensure a diverse patient population, bilingual research and clinical co-ordinators were available as an integral part of the team for patient and caregiver engagement at the time of enrollment. Baseline assessments were completed prior to randomization utilizing validated survey instruments. Screening logs recorded eligible patients, key reasons for ineligibility, and recruitment/refusal indicators.

**Randomization and Allocation Concealment**

We randomized patients (1:1) to intervention versus usual care using a computer-generated block permuted design for parallel assignment. Teams recruiting patients were unaware of allocation at the time of recruitment, and after enrollment till the first visit.

**Blinding**

We partially blinded participants by informing them that they would receive telehealth visits and remote BP monitoring within 3 months of discharge, in both arms at enrollment. The outcomes assessors were blinded to assignment.

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**Nonstandard Abbreviations and Acronyms**

| Abbreviation | Definition |
|--------------|------------|
| BP           | blood pressure |
| HBPM         | home blood pressure monitoring |
| NP           | nurse practitioner |
| SBP          | systolic blood pressure |
| TASC         | Telehealth After Stroke Care |

**Nonstandard Abbreviations and Acronyms**

**CLINICAL TRIAL**
Usual Care
Participants randomized to usual care received a transitional care management visit at 1 to 2 weeks post-discharge with primary care. In addition, they received stroke physician video visits at 6 and 12 weeks. Although not established standard of care, these are considered best practices.20

TASC Intervention (TASC With Usual Care)
Patients assigned to the intervention arm received TASC as well as usual care (Figure S2).

HBPM
The TASC intervention included provision of well-validated home BP monitoring devices (A&D Medical model No: UA-767PBT-Ci) with wireless transmission and electronic tablet devices capable of hosting secure 2-way video visits18 (Figure S2). Data transmission relied on cellular networks, without need for preexisting health technology, or Wi-Fi at home. Nurses telephoned patients every 2 weeks and for severely elevated BP (>180/110 mm Hg). They assessed for concerning symptoms and notified the physician who could decide whether additional intervention was needed by team members, who were also on the communication list. Tele nurses also reinforced changes to antihypertensive medication regimens made. Data from the tablet BP monitoring results and patient reported surveys were completed on the electronic tablet and wirelessly transmitted to our electronic health record (EHR) systems (EPIC Systems, WI) and to a web-based platform (eCare Coordinator) available for the telehealth nurses and the patient’s treating clinical team to see. If patients failed to measure BP data at home for 2 weeks, they were contacted by the call center nurse. Remote technical assistance was also provided.

Multidisciplinary Telehealth Visits Inclusive of a Pharmacist
The multidisciplinary team consisted of primary care nurse practitioner (NP), pharmacy, and physician care. Patient...
appointments were scheduled prior to discharge after enrollment. Caregivers, when involved in the day-to-day care of patients were included in scheduling of follow-up visits as they were expected to help patients adhere to follow-up calls and home BP monitoring. They received instructions regarding equipment use for telehealth video visits, and first telehealth visits after discharge were scheduled with the primary care NP at 1 to 2 weeks (±5 days), pharmacist at 4 and 8 weeks (±5 days), and physician at 6 and 12 weeks (±5 days). Study providers were expected to manage patients according to their prior clinical training. The first visit served as a transitions of care management visit with a primary care NP while pharmacist visits were designed to review medication adherence, side effects, and interactions.21 Hypertension treatment and medication adjustments accorded with published guidelines.22 Physicians provided tailored adjustments and stroke care (Figure S2).

Infographics
BP infographics, developed in English and Spanish through iterative participatory design sessions with community members, were tailored to blood pressure at the time of discharge and shared on screen during the first telehealth visit with primary care to drive a motivational interview regarding health behaviors23 (Figure S2).

Feasibility Outcomes
Feasibility outcomes included measures of recruitment, randomization, and retention rates.24 Adherence was assessed as adherence to at least 1 video visit and completion of home BP monitoring at 3 months in the TASC arm, and initiation of home BP measurements in usual care. BP medication adjustments were measured for provider activation and clinical engagement. Infographic delivery through video was evaluated in the TASC arm. Assessment of processes included data completion rates, including BP data delivery, and completion of self-reported surveys electronically. Fidelity of implementation was assessed using a brief checklist completed within each pharmacy visit. Telemedicine Satisfaction and Usefulness Questionnaire (TSUQ)25 was collected at 3 months to assess patient satisfaction. The survey included questions regarding satisfaction with clinical outcomes to drive a motivational interview regarding health behaviors23 (Figure S2).

Clinical Outcomes
HBPM was conducted among participants in the intervention arm from time of discharge through 3 months. Readings from the first 24 hours of HBPM at 3 months, closest to the final visit, were collected for the SBP outcome in both arms.

Patient demographics, social determinants of health, medical characteristics (risk factors, comorbid burden, and stroke adjudication), and BP medication data were collected from the EHR.

Data Integration
Data was maintained in REDCap26 surveys were sent at study completion. HBPM data and online surveys were collected on a web-based platform and transferred into REDCap. Only available HIPAA-compliant applications were used for video visits.

Statistical Methods
Descriptive statistics were calculated to characterize randomized study participants. Frequencies between groups were compared via χ² test, and continuous measures between groups were compared using t test for independent means. Generalized linear modeling was used to evaluate change in systolic BP from first to 12th week. We explored potential confounders and interaction terms through multiple linear regression models that independently included study arm with single covariates of interest as secondary analysis. We explored moderating effects of age, sex, race/ethnicity, and SBP control. Sensitivity analysis was performed to assess the impact of BP control at baseline on study results. Given exploratory nature, and small sample, missing data was not imputed. Analyses compared those who completed the study measures.

Sample Size
The primary aim was to evaluate feasibility. The target sample size was determined based on available resources and pragmatics of recruitment and assessment. With a sample size of 25 per arm, the rate of feasibility outcome (eg, retention) can be estimated with a SE ≥0.1.

RESULTS
Baseline Characteristics
Fifty patients were enrolled from October 2020 to April 2021 (Figure 1).19 A total of 44% of participants were Hispanic and 32% were non-Hispanic Black. Women comprised 36% of participants. Mean age of participants was 64.3 (±14.0) years; 68% had at least a high school diploma and 30% had commercial insurance. Baseline NIHSS was 2.7 (±3.3) among all participants with at most mild deficits; 32% had a prior history of ischemic stroke or transient ischemic attack, and 30% were depressed. A fifth were discharged on fewer than 3 antihypertensive medications and 8% were diet controlled (Table 1).

Feasibility Outcomes
Of the 345 patients screened for eligibility period over 6.3 months, 67 patients were eligible and approached. Almost 10 were enrolled per month for a total of 50 participants in the study. There were 17 patients who were eligible but could not be recruited. Of these, 6 were discharged before recruitment due to the time sensitive nature of the study recruitment, 8 declined to participate due to difficulty with technology or refusal to follow-up care, and 3 were engaged in other studies (Table 2). There were no significant differences in patient characteristics between those retained, and those who did not complete the study. Apparent trends included those retained in the intervention arm were more likely to have low education levels (22% versus 0%) and were Hispanic (Table S1).
All randomizations were conducted in time before discharge, visit, and telemonitoring allocation. Retention to study completion at 12 weeks was higher in the intervention arm (n=21, 84%) compared to the usual care arm (n=16, 64%, P=0.11 for difference). Adherence to video visits (91% versus 75%, P=0.14) was also higher in TASC. The first visit with primary care as part of usual care had the highest attendance of all visits in both arms with 78% in TASC versus 71% in usual care. All 4 patients lost to follow-up in the TASC arm did not show up at their first visit. Tele-pharmacy visits in the intervention arm had the lowest attendance with a total of 7 visits.

| Table 1. Baseline Characteristics | Intervention arm (n=25) | Usual care arm (n=25) | Total enrollment (N=50) |
|----------------------------------|------------------------|----------------------|------------------------|
| Age (mean, SD)                   | 65.9 (15.6)            | 62.6 (12.4)          | 64.3 (14.0)            |
| Sex                              |                        |                      |                        |
| Male                             | 64%                    | 64%                  | 64%                    |
| Female                           | 36%                    | 36%                  | 36%                    |
| Race/ethnicity                   |                        |                      |                        |
| Non-Hispanic White               | 20%                    | 20%                  | 20%                    |
| Non-Hispanic Black               | 24%                    | 40%                  | 32%                    |
| Dominican/Hispanic               | 56%                    | 32%                  | 44%                    |
| Non-Hispanic other               | 0%                     | 8%                   | 4%                     |
| Insurance status                 |                        |                      |                        |
| Medicare*                        | 32%                    | 20%                  | 26%                    |
| Private insurance                | 24%                    | 36%                  | 30%                    |
| Medicaid                         | 28%                    | 28%                  | 28%                    |
| No insurance                     | 4%                     | 12%                  | 8%                     |
| Insured, unknown type            | 12%                    | 4%                   | 8%                     |
| Education                        |                        |                      |                        |
| Less than HS                     | 20%                    | 12%                  | 16%                    |
| Some HS                          | 4%                     | 28%                  | 16%                    |
| HS diploma                       | 28%                    | 16%                  | 22%                    |
| Some college or college degree   | 32%                    | 24%                  | 28%                    |
| Higher education                 | 16%                    | 20%                  | 18%                    |
| Baseline mean SBP (mean, SD)     | 139.7 (18.9)           | 142.0 (18.9)         | 140.9 (18.8)           |
| Baseline Mean DBP (mean, SD)     | 80.2 (10.5)            | 79.9 (11.8)          | 80.1 (11.1)            |
| Charlson Comorbidity Index at baseline (mean, SD) | 3.3 (1.6) | 3.2 (2.3) | 3.2 (2.0) |
| NIH Stroke Scale at admission (mean, SD) | 2.1 (2.0) | 3.3 (4.1) | 2.7 (3.3) |
| Any history of stroke/transient ischemic attack | 28% | 36% | 32% |
| BP meds on discharge             |                        |                      |                        |
| None                             | 0%                     | 16%                  | 8%                     |
| One                              | 33%                    | 36%                  | 35%                    |
| Two                              | 42%                    | 32%                  | 37%                    |
| Three or more                    | 25%                    | 16%                  | 20%                    |
| PHQ-9 at baseline (mean, SD)     | 4.90 (4.69)            | 2.56 (2.03)          | 3.89 (3.91)            |
| Census Tract Household Income (mean, SD)† | 62 083 (33 281) | 64 814 (33 918) | 63 420 (33 271) |
| Ate less due to not enough money for food‡ | 32% | 13% | 22% |
| Ability to pay unexpected $400§   |                        |                      |                        |
| Pay immediately                  | 20%                    | 30%                  | 25%                    |
| Borrow/pay on credit             | 28%                    | 17%                  | 23%                    |
| Not able to pay                  | 52%                    | 52%                  | 52%                    |
| Report lacking companionship§     | 20%                    | 9%                   | 15%                    |

HS indicates high school; SBP, systolic blood pressure; and PHQ-9, Patient Health Questionnaire-9.

*Medicare pools Medicare and Medicare+Supplemental.
†n=49 not estimated for 1 homeless subject.
‡n=49 respondents.
§n=48 respondents.
Adherence to HBPM was completed by 21 (84%) in the intervention arm, and 16 (64%) in usual care provided home BP at 3 months to assess change in systolic BP. Assessment of processes including self-reported surveys was completed through the tablet provided with home BP device by 15 participants in the intervention arm, and 8 in the usual care arm. Remaining or incomplete surveys among other participants were guided to completion by the study team through telephone contact at study end. One BP monitoring device and tablet was lost as a TASC randomized patient became homeless after discharge. All participants had sufficient cellular coverage to transmit home BP data. All fidelity checklists were recorded and completed for pharmacist visits. In the intervention arm, 18 medication-related changes were made while 7 were made in the usual care arm. The tailored BP infographic was shared and discussed through video among 19 in the first visit, while 2 could not be completed due to unreliable internet access or difficulty viewing due to limited vision from stroke.

Patient feedback was assessed through TSUQ at 3 months. Satisfaction was reported among the intervention arm with average 3.9 (0.9) versus 4.1 (0.6) in the usual care arm. Usefulness was reported with an average 3.9 (0.9) versus 4.1 (0.6) in the intervention arm, and 4.3 (1.2) in the usual care arm (Supplemental Material).

Clinical Outcomes

Mean baseline SBP was similar in TASC (140±19 mm Hg) versus usual care (142±19 mm Hg). SBP control at 12 weeks was better in TASC (76% versus 25%, \(P<0.01\)). At 12 weeks, home SBP declined by 15.6±19 mm Hg from baseline in TASC and increased by 2.8±24 mm Hg (\(P<0.01\)) in usual care (Figure 2), with a total difference of 18.4±22 mm Hg between the 2 arms. SBP was lower from baseline in the intervention arm (−18.4 [−32.5, −4.4] mm Hg, \(P=0.01\)). The TASC intervention remained associated with a significant decline in home SBP over the study period when independently controlling for age (−16.8 [−30.7, −2.9] mm Hg, \(P=0.02\)), sex (−17.9 [−32.2, −3.7] mm Hg, \(P=0.02\)), and race (−19.9 [−34.7, −5.2] mm Hg, \(P<0.01\); Table S2).

SBP<130 mm Hg was defined as under control. Among Black patients with home BP data at 3 months, SBP control improved from 40% at baseline to 100% at 3 months in TASC (n=5), compared to a change from 14% at baseline to 29% at 3 months in usual care (n=7). Among Hispanic patients, SBP control also improved more in the intervention arm, from 23% controlled at baseline to 62% at 3 months (n=13), versus 33% at baseline to 17% at 3 months in usual care (n=6).

Sensitivity analysis included change in SBP by baseline SBP control. Among those with controlled SBP at baseline, patients in the usual care arm had a mean SBP change of +24.3 (±13.0) at 3 months, while TASC patients experienced a change of −4.3 (±9.1) mm Hg (Figure S3).

**DISCUSSION**

In this feasibility study of enhanced post-acute stroke care in patients with hypertension returning home after discharge, we demonstrated that it is feasible to conduct a randomized clinical trial comparing TASC plus usual care versus usual care in our health care system. We found a high rate of participation among eligible patients inclusive of a large percentage of Black and Hispanic individuals with lower literacy levels. We also demonstrated that the multicomponent TASC intervention was highly acceptable to patients. While exploratory, we showed promising impact of home BP monitoring, multidisciplinary visits, and

| **Feasibility Outcomes** |
|--------------------------|
| **Feasibility factors** | **Definition** | **Targets** | **Results** |
| Recruitment rates | Number recruited per month | At least 1 subject per wk | 1.79±1.15 subjects recruited per wk |
| Randomization | Number of eligible patients recruited | At least 70% of all eligible patients recruited | 75% of all eligible patients recruited |
| Retention rates | Number of enrollees retained in the study | 70% retained in each study arm | 84% vs 64%* |
| Adherence rates | Number of intervention components completed | At least 1 video visit in each arm, home BP monitoring at 3 mo, TASC infographic delivery | 91% vs 75% completed at least 1 video visit, 84% vs 64% with BP monitoring at 3 mo, 90% infographics delivered |
| Assessment process | Data completeness rates | 100% merging and access to BP data across platforms, survey completion | 100% BP data delivery, 100% survey completion (15 vs 8 electronically) |
| Fidelity | Precise implementation of intervention | Checklist completion at pharmacist visit | 100% recorded in visits |
| Feedback | Patient responses | Telehealth satisfaction, interdisciplinary competencies | Conducted among all retained patients; conducted among clinical and research team members |

BP indicates blood pressure.

*Usual care 16/25 completed BP monitoring for outcome, 18/25 completed patient reported surveys.
tailored infographic-driven education from discharge to outpatient care at 3 months. To improve SBP control remotely, TASC may be a feasible poststroke care model and facilitate clinical improvement in BP outcomes in an underserved setting.

Home BP Telemonitoring

We found a significant difference in SBP between the TASC and usual care arm at 3 months. In the NAILED trial (Nurse Based Age Independent Intervention to Limit Evolution of Disease) from Sweden, patients with stroke or transient ischemic attack were placed either with nurse telephone follow-up or usual care for blood pressure management. SBP was reduced by 6.1 mm Hg compared to 3.4 mm Hg in usual care over 36 months.27 In our trial, the magnitude of change over the first 3 months, when risk of recurrent stroke is greatest, suggests an additional benefit with our team-based intervention with telemonitoring and visits even amongst vulnerable US populations with lower education levels. Home blood pressure monitoring with nursing support has been conducted among stroke survivors in underserved communities15 and in nontraditional health outreach settings with pharmacist support in the general population28 among patients with uncontrolled hypertension. In our study, patients in usual care who were controlled at baseline were more likely to be uncontrolled at 3 months. This suggests value in including all hypertensive post-acute stroke patients in further study, both those uncontrolled and controlled at the time of discharge (Figure S3).

Transition of Care With Multidisciplinary Teams in an Underserved Setting

Our study was designed to promote transitions of care among post-acute stroke participants returning home in an underserved setting with outpatient multidisciplinary care. Transitions of care should include optimal communication and coordination of services, as the initial return to home is a vulnerable period for stroke patients. Effective hospital planning and outpatient follow-up within 1 month has been related to reduced risk of short-term hospital readmission.29 In Canada, consolidated post-discharge outpatient stroke care has been demonstrated to improve mortality and reduce cost per person for stroke care outside the hospital when compared to the standard of care.30

When considering utility of multidisciplinary visits, in Australia, the ICARUSS study (Integrated Care for the Reduction of Secondary Stroke) with bidirectional feedback between primary care and specialists demonstrated within goal SBP at 12 months in the intervention alone31 suggesting utility of combined primary care and stroke specialist services in the post-discharge period.

Adherence to the first visit was highest in both arms, and complete in the retained intervention patients. This
suggests importance of the first transitions of care visit in engaging participants. Further, care provided by NP at the first visit post-discharge to explain infographics and prescribe medications to address transitions of care may have supported patient follow-up and adherence. COMPASS (Comprehensive Post-Acute Stroke Services), a randomized pragmatic trial in North Carolina developed a NP-driven transitional care model. Although 35% of patients at intervention hospitals attended a clinic visit and the primary findings were not statistically significant, it did show a trend favoring self-reported home BP monitoring among intervention patients. We found a favorable response to home-based BP monitoring with telenursing support soon after discharge with higher adherence to visits. It suggests that an approach targeting BP control may be a promising outcome for proximal health behavior change and facilitate transitions of care among post-acute stroke patients.

In our study, tele-pharmacy visits were not adhered to by most participants, probably because of the burden of individual appointments and unfamiliar role of clinical pharmacists in patient care. Although twice as many medications-related interventions were made in the intervention arm, most were outside of these visits in response to elevated BP readings monitored by the physicians. There may still be utility in engaging pharmacists in the poststroke care team. In a randomized clinical trial conducted among patients with recent minor stroke or transient ischemic attack, comparing monthly outpatient follow-up with a pharmacist case manager (intervention) or nurse (active control) over 6 months, there was substantial improvement in SBP in both arms, but greater benefit with active pharmacist case management. Benefit may be related to their ability in some locations to prescribe medications in a collaborative agreement with treating physicians according to the treatment algorithms rather than escalating to physicians. This lends credence to the idea that adding pharmacists to the multidisciplinary team post-discharge would help in such teams with a focus on outpatient care. Furthermore, there is evidence that pharmacist-led hypertension management with blood pressure telemonitoring can be effective in a primary care setting and may be cost-effective in high-risk patients. Integrating tele-pharmacists early post-discharge as part of multidisciplinary team visits with other providers may reduce patient burden of recurring visits, and reduce clinical inertia through collaborative drug therapy management for stroke patients.

In addition to race, education, income, zip code poverty, health insurance, social isolation, and residence have been reported as social determinants affecting incident stroke. We found these to be prevalent in our population, among intervention and usual care arms. In a study in California among chronic stroke patients, SUCCEED (Secondary Stroke Prevention by Uniting Community and Chronic Care Model Teams Early to End Disparities) aimed to compare poststroke outcomes in ethnic minorities with a multimodal coordinated care intervention, but only 14.5% participants completed intervention delivery, less than a third presented to the clinic, and there was no significant change in SBP. In our study, among the intervention arm those retained were more likely Hispanic and with low education levels. This suggests that providing appointments to stroke patients before discharge, identifying and engaging informal caregivers in the immediate post-event period, and introducing the post-care clinical team with language-concordant instructions served to facilitate continuity of care after discharge and better adherence to the treatment protocol. Including culturally sensitive and language concordant measures in our design may have assisted in patient engagement. As a large proportion of our local population is Hispanic, multigenerational family living is common and support harnessed by identifying and involving caregivers in the family before discharge may have utilized these cultural strengths.

**Infographics**

As these were not previously utilized in patient care as a clinical communication tool for engagement, sharing these tailored infographics was a new approach integrated into the patient’s first post-discharge visit. A motivational interview centered around BP control and goal measurements with education regarding hypertension was feasible through video visits. The tailored infographics discussed at the first visit may have aided in improved adherence but there is need to further examine these as a clinically meaningful strategy for attending to health disparities among those with varying levels of health literacy.

**Limitations**

Limitations included the study sample size such that between group differences should be interpreted cautiously. Given feasibility of this approach, an adequately powered trial will be planned with a goal to study adequate BP control with enhancement in self-management. Differences in completeness of outcome data collection in the 2 arms may have been due to bias in the TASC patients who were initiated into home BP monitoring early after discharge as opposed to usual care at 3 months. There were more dropouts among patients discharged home without BP medications, particular to the usual care group, suggesting that these individuals may not have identified with a diagnosis of hypertension (Table S1). This may be considered as an exclusion criterion in future study. There were some expected imbalances between the 2 arms.
Future Directions

There is need for qualitative methods to understand the patient experience, as well as discussions with stakeholders pertaining to implementation barriers with a focus on cost and sustainability. Identifying most important specific components within the TASC approach will help to inform the optimized intervention, consisting of optimal doses of the selected components for eventual evaluation in a standard confirmatory randomized controlled trial.  

Conclusions

The data provides feasibility of the TASC approach, and its application through a telehealth-based platform. Enhancing post-acute stroke care with home BP telemonitoring is a promising approach to improving hypertension control in an underserved setting that should be tested in a definitive powered trial for the most effective strategy.

ARTICLE INFORMATION

Received February 2, 2022; final revision received August 18, 2022; accepted August 29, 2022.

Presented in part at the International Stroke Conference, New Orleans, LA, February 9–11, 2022, and the American Academy of Neurology annual meeting, Seattle, WA, April 2–7, 2022.

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Acknowledgements

The authors acknowledge TASC coordinator Carmen Castillo, team providers Yuliya Baratt and Marie Garcon, and NYP Digital Health project lead Adina Fraser.

Sources of Funding

This work was supported by the National Center for Advancing Translational Sciences, National Institutes of Health, through Grant Number UL1TR001873.

Disclosures

None.

Supplemental Material

CONSORT Checklist

Figures S1–S3
Tables S1–S2

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