Implementation of a Post-Acute Comprehensive Transitional Care Model for Stroke Survivors

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Acknowledgements and Disclosures

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Pragmatic Trials
Care Gaps
Design Aspects
Care Model
Implementation Update

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Pragmatic Trials
Pragmatic Trial

“The cornerstone of a pragmatic trial is the ability to evaluate an intervention’s effectiveness in ‘real life’ and achieve maximum external validity, i.e., to generalize results to many settings.”
Pragmatic vs. Explanatory

- Pragmatic trials:
  - High external validity
  - Large sample size
  - Simple design
  - Diverse settings
  - Mostly phase IV

- Explanatory trials:
  - High internal validity
  - Smaller sample size
  - Sophisticated design
  - Controlled environment
  - Mostly phase II-III
Pragmatic Research

- Stakeholder Input
- Diverse, representative populations
- Multiple, heterogeneous settings
- Outcomes important for care decisions and policies
- Comparison conditions in real-world
- Consistent with clinical workflow
- Health system return on investment
Pragmatic Research

Involves patients with complex, comorbid conditions.

Addresses questions important to multiple stakeholders.

Takes place in typical clinical setting so results feasible for real-work uptake.

Pragmatic = Implementable + Sustainable
Care Gaps
Stroke Care: Where are the gaps?

- 42% of stroke patients were not referred to any post-acute care (Gage, et al. U.S. DHHS 2009)
- 65% of patients under age 65 discharged without post-acute services (Bettger, et al. J Am Heart Assoc 2015)
- No performance indicators for processes of care after discharge
A patient is being discharged from the hospital. What could go wrong?

**Follow-up:**
- Scheduling
- Primary care provider
- Therapy
- Transportation

**Medications:**
- Reconciliation
- Effects
- Parameters
- Affordability
- Accessibility
- Cognition
A patient is being discharged from the hospital. What could go wrong?

Blood pressure:
- Stability
- New/adjusted meds
- Self-management

Does the patient need supervision?
- Mobility
- Cognition
- Social Support
Voices of Stroke Patients

“After the stroke I had new prescriptions... I couldn’t dispense my medications into daily doses. This math deficit was not recognized until I got home. I lived alone and I had to take care of myself and I was unable to cope.”

A follow-up phone call has got to be the prime piece that has to happen in stroke recovery.”

60 year old, white male, living in urban NC, member of the business community
COMprehensive Post-Acute Stroke Services (COMPASS)

- Addresses the gaps that occur after hospital discharge with comprehensive assessments.
- Post-acute pathway for recovery and prevention.
- Structure and process that is comprehensive, systematic, and patient-centered.
- Provides an individualized care plan that can be shared with the patient and all providers.
Design Aspects
COMPASS Design and Aims

• Cluster-randomized trial
• Hospitals randomized, not patients
• Primary Aim:
  • Comparative effectiveness of COMPASS model vs. usual care on stroke survivor functional status at 90 days post-stroke (Stroke Impact Scale-16)
• Secondary Aims:
  • Assess caregiver strain at 90 days
  • All-cause readmissions at 30 and 90 days
  • 90 day mortality
  • Mortality, health care utilization, use of TCM billing codes at 1 year
A Pragmatic Trial in North Carolina

Diverse health systems, **all patients discharged home**, clinical workflow, and CMS billing.

6,022 patients enrolled
Explanatory Trial
Can an intervention work under ideal conditions?

Pragmatic Trial
Does an intervention work in diverse patients and real world conditions?
COMPASS:
A model of care to address gaps in post-acute care
• **Model:** Early supported discharge

• **Care Team:** Stroke-trained advanced practice provider (APP), NP, PA, or MD, and Post-acute Coordinator (PAC), RN, for care coordination

• **COMPASS-CP:**
  --- **Chronic disease management:** Connects hospitals, community providers, and community agencies
  --- **Billable** with Transitional Care Management (TCM) or Complex Clinical Management (CCM), consistent with MACRA requirements
  --- **Individualized care plan** addresses the needs of stroke survivors and their caregivers
Finding The Way Forward

- **Numbers**: Know your numbers: blood pressure, blood sugar, cholesterol, etc.

- **Engage**: Be active: engage your mind and body

- **Support**: Ask for help: for yourself and your caregivers from community resources

- **Willingness**: Be willing: to manage your medicines and lifestyle choices
Patient experience with COMPASS

Enrollment/Case Ascertainment

New symptoms? F/u with PCP? S/S of stroke? connected to therapy services? Transportation?
7-14 Day Visit

PAC will Perform iPad Generated Functional Assessment
Provider Hand Off Report
7-14 Day Visit

APP Evaluation
APP’s Systematic Evaluation

- Hospital overview
- Residual Neurological Deficits
- Stroke Related Complications
- Lifestyle Management
- Medication Management
- Physical Mobility
- Cognition
- Depression
- Risk Factors
- Falls

- ADLs
- IADLs
- Social Support
- Caregiver Availability and Capability
- Transportation
- Financial
- Advance Directives
- Access to Primary Care, Home Health/Outpatient Rehab, others
- Readmissions
Generate e CARE Plan based upon patient’s input and APP assessment.

https://compasstraining.phs.wakehealth.edu/dspLogin.cfm
Referrals Help Get Patients Support

PAC will assist in connecting patients to the referrals.
MOVEMENT MATTERS for recovering:

- Fitness and Health
- UE Dexterity and Function
- Safe Mobility and Independence in Home and Community

Movement Matters Activity Program (MMAP)
The MMAP has 3 goals:

- Prescribes Structured and Progressive Exercise and Physical Activity
- Matches Health Service Setting with Survivor Function and Benefit Coverage
- Aligns Healthcare Quality Reporting Measures
Sharing the plan with the patient

My Goals for My Recovery, Independence, and Health are:

<table>
<thead>
<tr>
<th>Numbers: Know My Numbers</th>
<th>What are my concerns?</th>
<th>Why is this important to me?</th>
<th>How do I find my way forward?</th>
</tr>
</thead>
<tbody>
<tr>
<td>My Blood Pressure is 170/80</td>
<td>High blood pressure damages the arteries that bring blood to the brain. This can cause another stroke. A blood pressure less than 120/80 is considered normal.</td>
<td>Healthy numbers lead to a healthy life. Keeping track of my numbers will decrease my chances of having another stroke.</td>
<td></td>
</tr>
<tr>
<td>My LDL (bad) cholesterol level is 120</td>
<td>A high LDL (bad) cholesterol level puts me at risk for another stroke. My bad cholesterol level should be less than 70.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not know all of the risk factors for stroke</td>
<td>There are risk factors I didn’t realize could cause another stroke. It’s important that I am aware of these risk factors, and my own specific risk factors, so I can make correct lifestyle choices to prevent or manage them.</td>
<td>There are many factors that can put me at a higher risk of having another stroke. These risk factors are:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• High blood pressure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Smoking</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Diabetes or high blood sugar</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Irregular heartbeat or atrial fibrillation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Heart disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• High cholesterol</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Physical inactivity</td>
<td></td>
</tr>
</tbody>
</table>
Information on the Individualized eCare Plan

• What are my health concerns?
  — Explains issues found through eCare Plan assessments.

• Why is this important to me?
  — Explains how this issue can affect overall health and stroke recovery.

• How do I find my way forward?
  — Provides recommendations and referrals for dealing with the health issues.

• Summative Report:
  — A summary report created for patients that are at high risk of readmission.

• Community Resources Page:
  — Provides contact information to services that were recommended in the How do I find my way forward column of the eCare Plan.
## eCare Plan

### COMPASS: Finding my Way to Recovery, Independence, and Health

**My goal(s):**
- work
- friends
- family

<table>
<thead>
<tr>
<th>Numbers: Know My Numbers. Know My Risks.</th>
<th>What are my concerns?</th>
<th>Why is this important to me?</th>
<th>How do I find my way forward?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>My Blood Pressure is 180 / 90</strong></td>
<td>High blood pressure damages the arteries that bring blood to the brain. This can cause another stroke. A blood pressure less than 120/80 is considered normal.</td>
<td>Healthy numbers lead to a healthy life. Keeping track of my numbers will decrease my chances of having another stroke. I can take my blood pressure every morning and keep a log of my blood pressure numbers. Weight loss and exercise can reduce my risk of developing diabetes and cardiovascular disease such as stroke.</td>
<td></td>
</tr>
<tr>
<td><strong>My hemoglobin A1c level is 6</strong></td>
<td>Prediabetes is when my blood sugar levels are higher than normal and I am at risk for developing diabetes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>My LDL (bad) cholesterol level is 100</strong></td>
<td>A high LDL (bad) cholesterol level puts me at risk for another stroke. My bad cholesterol level should be less than 70.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name: Rica M. Abbott  
December 16, 2016  
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## Community Resources: Numbers

| Organization and Program Information: | (336) 904-0300  
1398 Carrollton Crossing Drive,  
Kernersville, NC 27284  
http://www.ptrc.org/index.aspx?page=204 |
|--------------------------------------|-------------------------------------------------------------|
|                                      | Piedmont Triad Regional Council Area Agency on Aging  
Extended Health Community Programs |

**This program has a special referral process, please see website.**

| Organization and Program Information: | (919) 855-3500  
101 Blair Drive  
Raleigh, NC 27603  
https://www.ncdhhs.gov/divisions/dvrs/vr-local-offices |
|--------------------------------------|-------------------------------------------------------------|
|                                      | NC DHHS  
Vocational Rehabilitation |

**This program has special eligibility requirements, please see website.**
Patient experience with COMPASS

30, 60, 90 Day Phone Calls
Never discourage anyone who makes continual progress, no matter how slow.
Lessons Learned, Helpful Hints, and Tips for Successful Implementation
Top 10 Lessons Learned

from the pioneering clinicians who have implemented COMPASS over the last year...
1. Champion

• Starting even before implementation, continued commitment to stay on track.

• “From the top of the organization down” COMPASS is seen as just as important as any other responsibility with support from supervisors, management, and administration.
2. Vision

- Ability to see the benefits.
- Recognize this is the future of health care.
- Commitment to care for the whole patient across the continuum of care.
- Awareness of bundled payments.
- Understanding long term financial benefit with reduced readmissions and “soft dollars” saved.
3. Organizational Buy-In

- Horizontal and vertical buy-in to the intervention.
- Recognizing that:
  - Organizational culture needs to support implementation of COMPASS as Standard of Care.
  - Support needs to be fostered in administration and direct care staff.
4. Consistency in COMPASS Staff

- As much as possible, have consistency in the PAC and APP who are providing the COMPASS intervention.
- This helps with intervention fidelity and localizes the shared responsibility/accountability for implementation.
5. Backups

• Identify backups for 2 key positions – PAC and APP!

• Important that those people should either be ready at all times to take over or have a backup for themselves as well.
  – Especially important during holidays and in the case of extended illness or absence.

• COMPASS will help train backups.
6. Discharge Order

- Put 7-14 day visit on the discharge order!
- This tells patients: This plan is our standard of care for patients like you.
- Discharge planner and case manager need to know patient is a COMPASS patient for consistent messaging.
7. Location of 7-14 Day Visit

- Best when APP is in a neurology office, or cardiology clinic, or at the hospital.
- Patients see a specialty visit differently and have been more likely to return.
- Patients want to see their own PCP, not a different PCP.
- Challenge: Patient may have additional and higher co-pays or out of pocket expenses if visit is with a specialty clinic.
8. Get on the Agenda of Monthly Medical Provider Meetings

- To reassure primary care providers that COMPASS:
  - wants to support the PCP.
  - respects the long term relationship PCP has with the patient.
  - recognizes that PCP cares for patient long term, and COMPASS cannot do that.
9. Engage Community Resource Network

- Area Agency on Aging (AAA):
  - Regional Caregiver Support Specialist
- Pharmacy:
  - Community Care of NC Network (CCNC)
- EMS:
  - Paramedicine Program
- Social Worker, Discharge Planner, or Others Making Referrals at the Hospital
- Other Key Stakeholders in Your Community
10. New Standard of Care

• COMPASS is presented as standard of care, not as an add-on research study.
• Add COMPASS metrics to performance measures presented to your Quality Department, Stroke Team, Joint Commission Prep Team, and other quality-related teams so it looks like any other program being monitored for performance.
Thank you

https://www.nccompass-study.org/