

Early Insights Into Improving Transitions For Stroke Patients



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Objectives

- 1) participants will learn about care transition models currently used in the United States
- 2) participants will increase their understanding of the range of challenges that stroke patients and caregivers experience during the transition from hospital to home after an acute stroke
- 3) participants will identify two practice behaviors that will improve the transition experience for stroke patients and families



Stroke in the United States

- 795,000 strokes occur each year in the US (25% are recurrent); the vast majority are ischemic strokes (blocked blood flow to the brain).
- Stroke is leading cause of cause of serious long-term disability in the US (Mozaffarian et al., 2015).
- There are 4.8 million stroke survivors living in the community, 50% of whom need assistance with ADL's or IADL's .
- Loss of confidence, independence, and loss of self are seen among stroke survivors (Salter et al., 2008).
- Stroke caregiving characterized as stressful and burdensome (Jaracz et al., 2015; Rigby et al., 2009)
- Spouses experience grief associated with the loss of, or shift in, their roles, as well as the loss of their relationship with their partner (Backstrom et al., 2010).

Healthcare Transitions



- What are care transitions?
 - Between levels of care
 - Types of facilities
- Why are they important?
 - Policy
 - Patient care
- What are transitions associated with?
 - High risk for those with complex health conditions
 - Much of national conversation has centered on cost, particularly readmissions (Kind et al., 2007)

Why the interest in care transitions?



- Hospital/Systems
 - Shorter hospital stays
 - Changes to reimbursement model
 - 30-day mortality and readmission measures
 - Greater system integration of in-hospital and post-hospital services
- Patients/Caregivers
 - Recovery continues after discharge
 - Navigating post-acute care services is challenging for patients and families

Challenges of Hospital based Stroke Care



- Average hospital length of stay is 4 days
 - Little time to absorb information
- Patients and caregivers are not in the right frame of mind to absorb information during hospital stay
 - Patients report receiving information but are not able to process and retain it.
- Wide individual variation in stroke recovery determined by severity, pre-stroke function, age, social factors etc.

Challenges for Stroke Patients Discharged Home

- ~ 50% of patients discharged home directly
- Another 25% return home after rehab (IRF, SNF)
- On returning home they can face many unexpected challenges
 - They “don’t know”

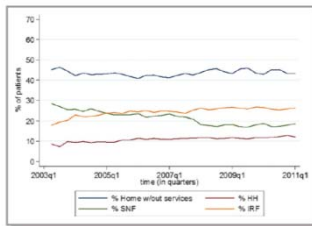


Figure 2. Proportion of patients discharged to postacute care of IRF, SNF, and HH or discharged home. HH indicates home health; IRF, inpatient rehabilitation facility; SNF, skilled nursing facility. Betge; JAMA 2015

Potential Solutions to the Problem of Transitions

- Coordinated case management programs
- Improve communication
 - eHealth Technologies (eMR, patient portals, HIE, in-home monitoring)
- Improve self-management
 - Access to information, patient activation, patient engagement



Current Transition Programs

- Focus on transition from hospital to home
- Varying target populations
- Types of service
 - Enhanced communication
 - Patient education and teaching
 - Follow-up in the home
 - In person visits
 - Phone calls
 - Range of health professionals



Sample Programs

- Transitional Care Model (TCM)
- Care Transitions Intervention (CTI)
- Re-Engineered Discharge (Project RED)
- Enhanced Discharge Planning Program (EDPP)
- Better Outcomes for Older Adults Through Safe Transitions (Project BOOST)
- The Bridge Model



Program Variability

- Length
- Intensity
- Staffing

Challenges to evaluation



Improving Outcomes

- Reducing Re-admission (strong evidence)
 - TCM*, CTI, Project RED
 - Range from 19-70% reduction, with varying follow-up periods
- Effective Program Components (suggestive evidence)
 - Duration longer than 9 weeks
 - Use of nurse care managers
 - Multiple components (more is better)



Conclusions



- Will and interest in solving the transitions challenge
- Promising interventions available
- Replication challenges
- More research needed
- No programs for stroke
- How can technology enhance these interventions?



The MISTT Study

The MISTT Investigators

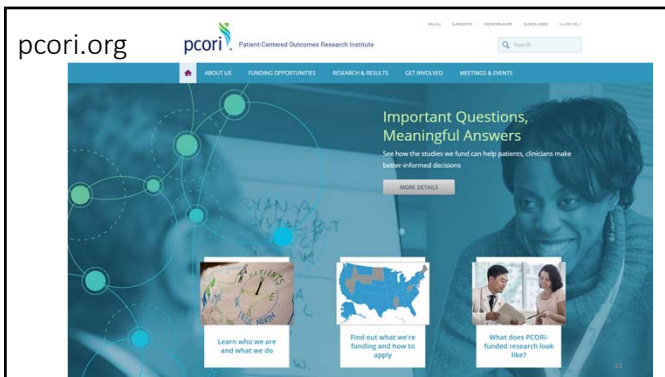
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• *MISTT: Improving Care Transitions For Acute Stroke Patients Through A Patient-centered Home Based Case Management Program*

• 3 year award from PCORI

• October 2014 to November 2017

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MISTT Study Aims



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•Aim 1: Stakeholder Panels (Year 1)

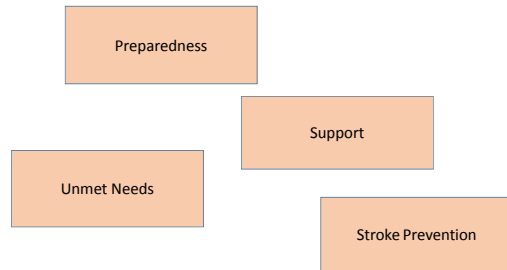
- Assemble two panels:
 - recent stroke survivors and their caregivers
 - health care providers (i.e., nurses, therapists, social workers, discharge planners, physiatrists, neurologists)
- Goal: to identify **informational needs, preferences, and patient-oriented outcomes** of stroke patients and their caregivers relevant to the transitional care period.

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Patient/Caregiver Perspectives (Aim 1)

- The transition home after a stroke is a time of confusion, loss, and upheaval. Patients and caregivers feel unprepared despite education given while in the hospital.
- Their information needs exceeded that which was provided, particularly in their need for personalized information.
- **Fear of recurrence** and **stroke prevention** were primary concerns for all focus group participants.
- For many this was their first experience trying to access multiple health care services and coordination was a challenge.
- More information regarding challenges to anticipate once home was desired by both caregivers and patients.
- Couples faced multiple unanticipated psychosocial challenges, such as: loss of support, role confusion, and labile emotions.
- The focus group experiences themselves were seen as therapeutic, providing some normalization and opportunities to gain support from others in similar situations.

What is a “good transition”?



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Aim 2: To incorporate the experiences, needs, and preferences of stroke survivors and caregivers into the design of an intervention

- 1) **Social Work Case Managers (SWCM)** program that includes home visits and telephone follow-up over a 90-day period following return to home
- 2) **Virtual Stroke Support Portal (VSSP)** a patient-centered online communication, information and support resource (a.k.a. **the Website**)

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• Aim 3: The MISTT Study (Reeves et al., 2017)

- Test the two complementary interventions against usual care by enrolling 320 acute stroke patients discharged from 3 Michigan hospitals in a **pragmatic, randomized, open clinical trial**.
- The 3 group parallel design will compare:
 - Usual care.
 - Social Work Case Manager (SWCM) program **only**.
 - Social Work Case Manager (SWCM) program, **plus** the Virtual Stroke Support Portal (VSSP) (Website).
- 3 Hospitals (Ingham and Washtenaw counties)

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Trial Inclusion Criteria

- Acute ischemic or hemorrhagic stroke
- Adult, living at home prior to stroke
- Stroke symptoms on presentation (NIHSS >= 1)
- Some disability at discharge (mRS >=1)
- Discharged home, OR
 - If discharged to rehab facility (IRF or SNF) must have expectation of return to home within 4 weeks.
- Proxy respondent available if patient consent not possible (e.g., aphasic, cognitive impaired)

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- Patient enrolled while in the hospital
 - Caregivers approached after patient enrolled
- Intervention lasts 60-90 days from date of discharge to home
- Data collected via telephone interview at 7 days and 90 days

Trial Outcomes - Patient

- Primary Outcomes:
 - Patient Activation Measure (PAM)
 - PROMIS Global10 QOL scale
- Secondary Outcomes:
 - Depression (PHQ-9), NeuroQOL anxiety measures
 - 90-day home time, readmissions, stroke recurrence
- Intermediate Outcomes:
 - PROMIS QOL self-efficacy scales (emotions, daily activities, social engagement, medication management)
 - PROMIS QOL support measures (informational, emotional, and instrumental)

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Trial Outcomes - Caregiver

- **Primary Outcomes:**
 - Bakas Caregiving Outcomes Scale (BCOS)
 - Depression (PHQ-9)
- **Secondary Outcomes:**
 - Modified caregiver strain index (MCSI), Oberst Caregiver Burden Scale (OCBS), Unhealthy days (30-days)
- **Intermediate Outcomes:**
 - PROMIS QOL support measures (informational, emotional, and instrumental)

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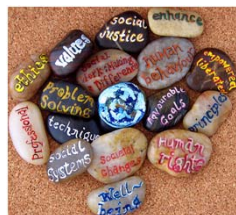
Our Partners

- Sparrow Hospital, Lansing
- University of Michigan Health Center, Ann Arbor
- St. Joseph Mercy Medical Center, Ann Arbor
- **Advisory Board**
 - Consumer (stroke patients and caregivers) members
 - Professional members
 - Throughout state of MI
 - Across care settings and home care
 - Interprofessional



Social Work Case Management Intervention

- Groups 2 and 3 only
- Group 2= SWCM services only
- Group 3= SWCM services, plus website access
 - Website is compendium of:
 - Stroke education materials
 - Stroke prevention
 - Community resources
 - Support
 - Caregiver resources
 - Hospital portals for eMR, communication



Components of Case Management

- Engagement
- Assessment
 - Biopsychosocial
- Service planning
 - Coordination of medical, community, and social services resources
 - Assistance with obtaining necessary services (application, eligibility, access, advocacy)
 - Referrals to services
 - Follow-up regarding arranged services



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Components, continued

- Patient education re: stroke, management at home, resources
- Short term problem solving
- Emotional support
 - Stress management, empathic listening, problem solving, changes in role, caregiving
- Teaching planning and organizational skills
- Monitoring, follow-up, and documentation

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Intervention Process


- Randomized to intervention (60 day clock starts)
- SWCM makes contact as soon as patient is home
- Biopsychosocial assessment is completed
- Service plan, based on patient and caregiver goals, is developed
- Follow up as needed based on needs and service plan
 - Coordination of service
 - Communication with providers
 - Practical support and resources
 - Emotional support and referrals
- Prioritize- safety, medication problems, follow PCP/Neurology

Ways we are helping

| | |
|-------------------|--|
| Support | Emotional support, education, linking to community services, sounding board |
| Preparedness | Education about stroke, organization, tangible resources, problem-solving, communication |
| Unmet Needs | Identifying needs, referrals, resources, advocacy, monitoring |
| Stroke Prevention | Education about stroke, stress management, support of lifestyle modification, facilitation of medical follow up services |


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Progress So Far....



- Anecdotal feedback is positive
- SWCM reduces burden for patients and caregivers
- SWCM provides a lot of stroke education and communication support with health care providers
 - Connecting to services, facilitating services, empowerment
- Large array of unmet needs
 - Mental health
 - Financial strain
 - Medical needs of co-morbid conditions
 - Role strain- patient for our study but caregiver for family member

Challenges related to SWCM Intervention



- Making first contact can be a struggle
- Patient/caregiver overwhelmed upon returning home
- Difficult for some to accept help
- Communication among and between health care providers is fragmented
- Pre-stroke psychosocial needs are daunting

Unmet Psychosocial Needs

- Income/Financial Strain
 - Assist with applying for disability, either short term or long term
 - Assistance with medical bills from stroke hospitalization
 - High cost for many of getting outpatient OT/PT/SLP
 - \$20 co-pay for 3 services 3 times a week = \$180
 - Food Pantries
- Medical Coverage
 - Applying for medical assistance
 - Applying for medication coverage
- Transportation
- Resources are scarce for some needs
 - housing, home repair



Messages to Share

- Tip sheets (2 so far)
- **Communication with Your Health Care Professionals after a Stroke**
- **Some Things to Know When You Return Home After a Stroke**



Looking Ahead

- Final results will be complete winter of 2017
- We are interested in getting our information out there
 - The importance of transitions in stroke
 - Informational and support needs of stroke patients and caregivers
 - How our findings impact the delivery of health care
- How can we leverage our learning to improve transitions and ultimately the experience of care for patients and families?



Questions?

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- For more information about the MISTT study, please visit:
<http://www.epi.msu.edu/mistt/>



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