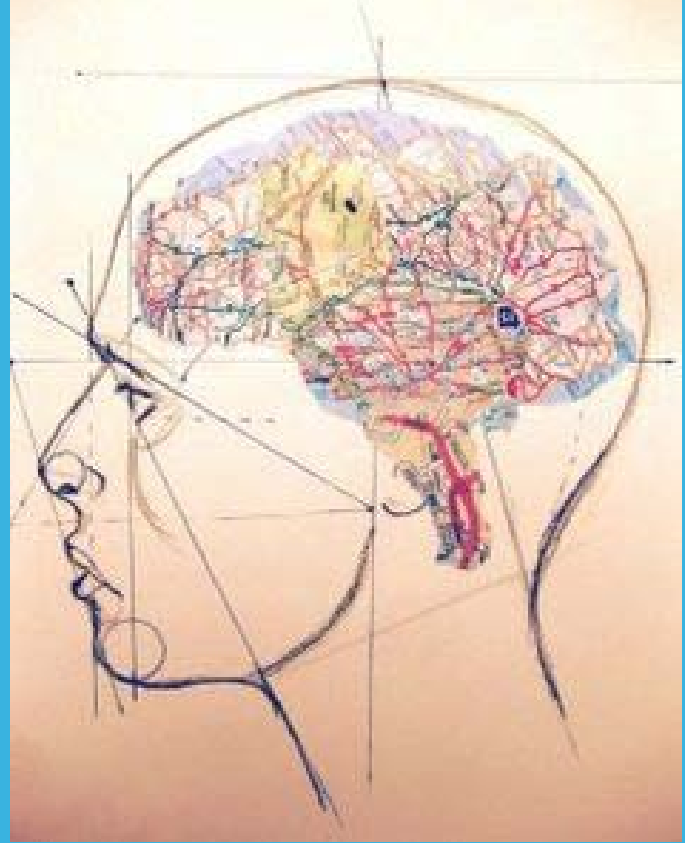


2014 RESEARCH DAY PROPOSAL: THE SEARCH FOR A HIGHER STANDARD OF CARE

JAMIE KEY, DO. PGY-2



BACKGROUND ON INPATIENT REHAB FACILITIES (IRF)

- There are 1,140 IRFs in the US
 - 1,000 rehab units within hospitals
 - **217 freestanding rehabilitation hospitals**
 - 68% for-profit; 30% nonprofit.
 - Most with designated acute care facilities (ACFs) for higher level of care
- **2014-2015 fiscal year:**
 - CMS proposes ~\$34,000 per patient
 - >\$160 million in transfers from federal government to IRF medicare providers. [1]

WE LIVE IN A FINANCIAL WORLD

- Acute Care Facilities are being pressured to decrease length of stay (LOS) thereby reducing total hospital cost.
- What does that mean for IRFs?
 - Earlier discharge from ACF
 - Decreased time during stabilization phase from inciting event or injury
 - Increase in medically complex patients
 - Increase in medical needs/screening
- **Despite prescreening, complications still arise**
 - Often prompting return to acute care hospital (RTACH).
 - Ultimately, a portion of allotted rehab monies are lost.

STRIDES THUS FAR:

- **Several studies have documented rates of RTACH in general inpatient rehabilitation populations.**
 - Carney et al: 9-year retrospective study showed an 8% RTACH most commonly due to infection and pulmonary complications
 - Risk factors: Age >64 years, Spinal cord injury, or amputation
 - Wright et al: 11.8% RTACH for unstable co-morbidities
 - Siegler et al: 14% RTACH for post-surgical complications
 - Faulk et al: RTACH based on day and time of admission.
- Other studies have targeted patient subsets:
 - Traumatic brain injury
 - Patient's with neoplasms
- Ultimately: Reason for RTACH differs among patient sub-populations.

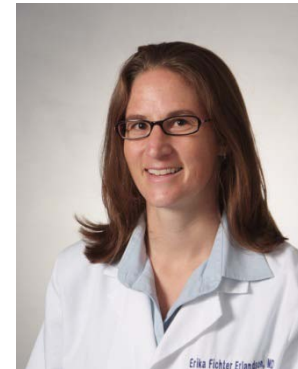
RESEARCH PLAN:

- **Retrospective Review of Stroke Rehabilitation Patients Who Required Return to Acute Care Hospital: A Quality Improvement Project.**
- ***Departmental Affiliations:***
 - University of Kentucky – Physical Medicine & Rehabilitation
 - Cardinal Hill Rehabilitation Hospital – Stroke Rehab Unit

Jamie Key DO
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Erika Erlandson MD
CHRH Stroke Attending



Collaboration: Jessica Lee MD – Medical Director UK Neurology Stroke Service

Design: Retrospective Chart Review

Setting: Inpatient Rehabilitation Facility, Acute Care
Facility



PARTICIPANTS

All patients admitted to IRF between July, 2012 and November, 2013 who required RTACH due to medical or surgical complications requiring RTACH

The study currently includes 94 patients who required RTACH

Pilot study underway to identify inclusion and exclusion criteria.



RISK FACTORS & OUTCOME MEASURES

The study will identify & compare:

- Patient demographics
- Admission diagnoses including anatomic distribution of stroke
- Stroke etiology; Surgical intervention required?
- Complications of Stroke
 - Aphasia
 - Dysphagia
 - DVT
 - Aspiration Pneumonia
- Patients who received consultation by the Rehabilitation Service during the initial acute care admission
- Admission and discharge Functional Independence Measures (FIM) scores
- Length of stay at acute care
- Date and time of admission to IRF
- National Institutes of Health Stroke Scale (NIHSS) scores on initial stroke presentation and day of discharge to IRF
- Multiple co-morbidities and risk factors of stroke
- Medications administered for secondary stroke prophylaxis, including anticoagulants.

ANTICIPATED CONCLUSIONS

The study is designed to identify trends of risk factors which should be addressed prior to admission to IRF.

If a set of risk factors can be identified, a protocol may then be developed for standardization of transition of care.



WE HAVE A PROTOCOL. PROPOSED NEXT STEP?

Stage two of this study would include a prospective view of use of the new protocol in acute care setting in efforts to:

- Stabilize risk factors prior to IRF admission to
- Decrease transfers to acute care
- Decreasing interruptions in rehabilitation
- Minimize disability
- Minimize unnecessary costs.

RESOURCES

1. The Federal Register: Medicare Program; Inpatient Rehabilitation Facility Prospective Payment System for Federal Fiscal Year 2015. updated April 16, 2014. www.federalregister.gov/articles/2014/05/07/2014-10321/medicare-program-inpatient-rehabilitation-facility-prospective-payment-system-for-federal-fiscal#h-99
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THANK YOU.

“We are, in the end, a sum of our parts, and when the body fails, all the virtues we hold dear go with it.”

- Susannah Cahalan, *Brain on Fire: My Month of Madness*

