Creating a Virtual Continuing Care Hospital (CCH) to Improve Functional Outcomes and Reduce Readmissions and Burden of Care

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Opportunity Statement

• Health care continuum assumes more risk
• Performance must be value driven
• Components, processes, and patient outcomes needed that demonstrate value (benefits vs. costs)

Proposal Synopsis

• The Affordable Care Act (ACA) mandates the bundling of acute and post-acute payments per “episode of care” (EOC) for hospitalized Medicare beneficiaries
• Pilot projects called for to examine the impact of bundling on processes, outcomes, and costs of care
• The continuing care hospital (CCH) as a test option
UnityPoint Health Des Moines (UPH-DM)

- Part of UnityPoint Health System (ACO)
- Three acute care hospitals:
  - Iowa Methodist Medical Center (IMMC)
  - Iowa Lutheran Hospital (ILH)
  - Methodist West Hospital (MWH)
- IMMC campus: Level 1 trauma center; Youker Rehab (23-bed IRF)
- ILH campus: Transitional care unit (TCU), 16-bed SNF
UPH Post-acute Venues

- Outpatient therapy (PT, OT, and SLP)
- Home health nursing and therapy services
- Durable medical equipment
- Palliative care services
- Hospice
- Long-term acute care hospital (LTACH) adult services (Cedar Rapids, IA)

Additional Components

- UnityPoint Health Physicians (UPHP): Multispecialty physician group
- "Affiliated" NH/SNF entities: Medical direction provided by UPHP

Vertical Integration at UPH-DM

- Stroke certification by Det Norske Veritas (DNV): Fully integrated stroke care from ED through discharge
- Total stroke admissions > 200 patients/year
**Current State**

- Acute
- LTAC
- Home Care
- TCU
- Outpt Rehab
- Acute Rehab
- Home Care
- Long Term Care
- Assisted Living

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**Younker Rehabilitation**

- Inpatient acute rehabilitation at Iowa Methodist
- Focus: Aggressive rehabilitation that teaches life management with functional impairments
- **Patient-required indicators:**
  - Inpatient (twenty-four-hour rehab RN required*)
  - At least two therapy disciplines (PT, OT, SLP) for three hours a day, five days a week (ramp-up time allowed = three days)
  - Intensive and coordinated plan for rehabilitation must be determined prior to admission

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**Transitional Care**

- Inpatient skilled level of care at Iowa Lutheran
- Focus: Health enhancement and self-care education in preparation for transition to home setting
- **Patient-required indicators:**
  - Inpatient (daily RN* assessment, intervention and education)
  - To determine a plan and prepare the patient/family for a safe and successful transition to home environment
Ideal Care State

• Ideally, our UPH-DM patients would have a simple and specified pathway for post-acute care that is customized based on their needs.

UDSMR® Research Collaboration

• UPH-DM, in collaboration with UDSMr, will develop a virtual CCH for the post-acute treatment of adult ischemic stroke patients hospitalized at IMMC.
• Integration of existing resources (facilities, personnel, clinical pathways, etc.) within and outside of UPH-DM in order to achieve optimal coordinated post-acute care.
Required Demonstration Features

- Best practices to deliver patient-centered post-acute clinical and rehabilitative care
- Use of standardized treatment protocols, order sets, and consistent caregivers
- Medical and administrative oversight and cost-accounting
- Linkage to key community SNFs at differing geographic locations, whose medical directors are tied to UPP and who are willing to adopt study protocols and grant staff access to study participants at their facilities

Protocol

- IRB approval from all study participation sites and informed consent of all patient participants
- Core team will develop and oversee implementation of clinical protocols for treatment and outcomes assessment
- Application of UDSm® instruments coupled with sufficient data management to record and track outcomes on all study participants for twelve months following acute discharge

Design

- The study is a prospective cohort study
- It uses a convenience sample of stroke patients admitted to the acute hospital, with rolling enrollment as patients become identified
- Each participant is recruited on the first day after admission and assessed with the AcuteFIM™ instrument
Function and Burden of Care as the Metric

- UDSMR has developed a common metric—burden of care/need for assistance, based on functional status—and maintains that this metric can be used to assess patients in acute care and throughout post-acute care venues.

Burden of Care

- The use of functional assessment instruments to specifically measure BoC helps ensure consistency, effectiveness, and efficiency.
- It also helps ensure that services are cost-beneficial throughout the post-acute care venues.

The FIM® Instrument

- Consists of eighteen items (thirteen motor items and five cognitive items).
- Uses a seven-level rating system:
  - Level 1 for complete dependence
  - Level 7 for complete independence
- Requires training and a mastery exam.
- Used primarily in inpatient rehabilitation to assess function and to demonstrate the outcomes of intensive therapy.
- Included in CMS’s IRF-PAI tool.
FIM® Rating Levels and BoC

<table>
<thead>
<tr>
<th>Total FIM® Rating Range</th>
<th>FIM® Rating</th>
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<tr>
<td>18–30</td>
<td>Level 1, Total Assistance</td>
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<td>31–53</td>
<td>Level 2, Maximal Assistance</td>
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<td>54–71</td>
<td>Level 3, Moderate Assistance</td>
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<td>72–89</td>
<td>Level 4, Minimal Assistance</td>
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<td>Level 5, Supervision/Setup</td>
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<td>120–126</td>
<td>Level 7, Complete Independence</td>
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The burden of care ends at level 6, Modified Independence.

AcuteFIM™ Instrument

- A derivative of the FIM® instrument
- Uses six of the original eighteen FIM® items and a three-level rating system (A, B, and C)
- Does not require extensive training or a mastery exam
- Developed to be used in acute care to assess BoC, aid in triage decision making, and project a full FIM® rating
- Created for ease of use in acute care venues
- Takes approximately five minutes to administer

AcuteFIM™ Items

- Eating
- Grooming
- Bowel Management
- Transfers: Toilet
- Expression
- Memory
Utility of the AcuteFIM™ Instrument

- Purpose is to yield a BoC and projected full FIM® rating
- As a result, clinicians could initiate an early treatment plan because the patient’s BoC at admission would be known
- Would accelerate discharge planning because the prognosis for the patient’s rehabilitation functional status would be known
- Provides a standardized, uniform assessment instrument that can be used to measure function and outcomes across the continuum of care

SigmaFIM™ Instrument

- Derived from the FIM® instrument
- Same eighteen items, but a three-level rating system
- Does not require extensive training or a mastery exam
- Intended for use in outpatient facilities and for home health to assess function and BoC
- Not sensitive enough to show changes and monitor outcomes (can detect large improvements in function, but not subtle ones)
- Takes five to ten minutes to administer

Additional Variables: Patient Outcomes and Utilization

- Episodic cost of care
- Thirty-day rehospitalization rates
- Post-acute ED visits
- Home care referrals
- LOS acute
- Time from onset to initial treatment
- Length of time in post-acute bundle
- D/C disposition
Patient Outcomes: Quality and Satisfaction

- Infection rates
- Medical complications
- Press-Ganey
- Evidence-based satisfaction survey

Methodology

- All consented stroke patients will receive at least one AcuteFIM™ assessment while in the acute care hospital
- The score on the AcuteFIM™ assessment will be used to predict the BoC
- Theoretically, the BoC will map to a projected eighteen-item FIM® rating

Phase 1: Acquisition of “Baseline” Data

- Systematic identification and tracking of adult ischemic stroke patients within our continuum
- Develop and implement patient screening and triage within and between acute and post-acute venues, using functionally-based algorithms
- Administer the AcuteFIM™ instrument and the SigmaFIM™ instrument to appropriate patient cohorts to determine functional outcomes at thirty and ninety days
- Compare utilization and functional outcomes and expenditures per EOC across various post-acute pathways
Phase 1: Acquisition of “Baseline” Data

- Daily review of cerebral MRI results reported at IMMC for adult patients diagnosed with acute ischemic CVA
- Rehab coordinator visits identified potential patient subjects to obtain informed consent

Results

- Fifty-two stroke cases collected to date
- Correlation between AcuteFIM™ rating and admission FIM® rating is 0.53

Descriptives

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Admitted from

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Discharge location

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Summary

- The results of this pilot looks very promising
- In a very short time, we will have data from over one hundred patients followed throughout the PAC continuum
- This data will contribute to the ongoing discussion between CMS and the rehabilitation community about projecting functional outcomes
Summary

- Currently, CMS requires completion of instruments unique to each PAC level
- Until recently, measuring rehabilitation outcomes across an entire episode of care has been impossible because the items and rating scales differ between instruments
- The CARE tool attempts to fill the need, but it has many limitations and requires much more extensive research

Next Steps

- Continue data collection at each phase of the adult subjects’ post-acute care within the continuum
- Identify additional SNF-level “preferred sites” as operational partners within the continuum
- Implement process changes that favorably impact outcomes within our post-acute venues (e.g., PCF on acute; on-site physiatry interventions in TCU and preferred SNFs) to enable “phase 2” comparisons to “baseline”
- Incorporate additional BOC metrics (e.g., Northwick Park Nursing Dependency Scale [NPDS])